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Papers Presented at the

National Conference on Vocational Education of Handicapped Persons

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Pittsburgh, ~~Pennsylvania~~
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NATIONAL CONFERENCE ON VOCATIONAL EDUCATION FOR HANDICAPPED PERSONS

William Penn Hotel
Pittsburgh, Pennsylvania
February 25-27, 1969

POSITION PAPERS

1. Dr. John W. Kidd, "Potential for Employment of the "Handicapped." Assistnat Superintendent, Department for the Mentally Retarded, Special School District of St. Louis County, Missouri

2. Dr. Jerry C. Olson, "Implementing Programs to Serve the Handicapped: Some Concerns and Considerations." Assistant Superintendent, Occupational Technical Training Education of the Pittsburgh City Public Schools.

3. Dr. Ralf Peckham,"Labor and Industry Look at the Training and Placement of the Handicapped." Assistant Superintendent, Department of Education, Michigan Board of Education.

4. Dr. Salvatore DiMichael, "Comprehensive Vocational Preparation of the Handicapped: An Inter-Agency Problem. Director, Institute for the Crippled and Disabled, New York, N.Y.

5. Dr. G. Orville Johnson, "Integrated and Segregated Vocational Education Programs for the Handicapped." Chairman, Faculty for Exceptional Children, Ohio State University.

6. Dr. Jerry Miller, "The Education of Mentally Handicapped Youth in a Large Urban Community. Director, Special Education, Philadelphia City Public Schools.

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Washington, D.C.

POTENTIAL FOR EMPLOYMENT OF "THE HANDICAPPED"

by

John W. Kidd, Ed.D.

A handicapped person is one who, due to real or presumed impairment or dysfunction, is judged by others to lack normal capacity to achieve.

Under the leadership of the President's Committee for Employment of the Handicapped, much has been learned about the extent to which persons labled as handicapped can perform with efficiency. Several approaches have been used: For example the "nesting"idea meaning that one must find the right job for the individual and prepare the job for that individual. Another approach has been to help the individual develop as many assets as possible in the way of personality and performance traits, and find the job in which he can succeed. The most fruitful approach has been to re-design jobs to accommodate the person's incapacity so as to capitalize upon his assets.

Research on employment of the handicapped, as reflected in the book, Guide To Jobs for the Mentally Retarded by Peterson & Jones, published by the American Institute for Research in 1964, reveals that job-holding depends not upon a particular skill but upon having appropriate personality characteristics. These personality characteristics are reflected in the check-list for job readiness used by the school district in which I am employed. It appears as Appendix A in this paper and was published in Exceptional Children, Volume 33, No. 8, April, 1967, pp. 581, 582, and 583. It goes beyond the personality characteristics and includes some skills that are advantageous to the job-seeker.

The pamphlet entitled Employment of the Handicapped in the Federal Government recently published by the United States Civil Service Commission gives attention to the desirability of job re-design which is necessary in order for the following objectives to be realized: 1. economy, 2. better use of manpower, and 3. better opportunities for persons at all levels. The placement of the handicapped through job re-design is said often to consist merely of altering environmental factors, such as re-engineering duties, not necessarily at low level of function, to take advantage of what a person can do effectively.

As an example of effective placement of the handicapped, you are referred to an article entitled The World of Work for the Educable Mentally Retarded by Kidd, Cross and Higginbotham in Volume 33, No. 9, May 1967 issue of Exceptional Children, pp. 648-649. In essence, this revealed that educable mentally retarded young adults who had completed a program in special education at ages 18, 19, and 20, and had been assisted in job placement by highly skilled individuals, were generally making satisfactory, productive adult adjustments. More than 80% of them were housewives, working, in trade school, or in the armed services. It is true that several of them were no longer technically mentally retarded under the regulations of the state in which they were schooled and employed, but they were mentally retarded using educational criteria.

William Sleith, President of the Iona Manufacturing Company, wrote as follows in the April 1966 issue of the journal Supervisory Management: "I now have about 35 retarded men and women among my 600 employees. Their flying fingers, devotion to the job and even dispositions more than compensate for their lack of intellect. Some of them are doing work which normal employees wouldn't want to do and they are taking pride in doing it well. You couldn't ask for better workers." He continues, "Generally speaking, it takes no longer to train a retarded worker for a routine task than it does a person of normal intelligence. And once he learns what is required, he develops speed quickly." He continues, "That's the only problem we've had with retarded employees - they work too fast. I think it's because of their complete concentration." He states, "One thing we've noticed about the retarded is the unusual personal pride they take in their work" and "absenteeism is no problem with them." He cites the experience of another industrial plant, Remco Industries of New Jersey. He quotes their President as saying that an efficiency study revealed that the mentally retarded workers are 5% less efficient in production than normal employees but that the absenteeism rate of the retarded is less than 2% compared with the plant average of 7% and that their lateness figure is 5% below the plant average. They found that there is less need for re-check on their work since once they learn the method they are more inclined to hold it without drifting. He further observed that they take few extended coffee breaks or health-nurse visits and that they tend to be safety-conscious and rarely experience injuries on the job. Mr. Sleith then notes that almost every business or industry that has tried the retarded has liked them. He cites Howard Johnson Restaurant, the Bendix Corporation, the Royal Rubber Company, and Lindfelt Glove Manufacturing Company as examples of the growing number of industrial operations in this country which find it advantageous to employ handicapped workers.

One might ask, in view of the great success in placing handicapped workers in employment, "Why is it necessary for vocational education to devote a significant part of its efforts to preparing the handicapped for employment?" The answer seems to be that, while in certain locations, the handicapped have been employed in great numbers, many of them are capable of a higher level of productive work than called for by the jobs in which they are conventionally placed. It has been observed by Higginboham that two skills which many individuals can learn will enable them to work in the burgeoning field of computerization of information. These skills are alphabetization and serialization and their combinations. It has been necessary, in most instances, for handicapped adolescents and young adults to be sent to private trade schools under vocational rehabilitation subsidy rather than being able to obtain special job preparation in the vocational education programs which already existed in their communities.

In several instances, special education programs have been able to incorporate vocational education personnel and techniques in the preparation of older adolescent boys and girls for the world of work. In still other cases, the regular vocational education high school has been able to assist the most able of the handicapped older adolescents in the transition from their special education or regular education programs to the world of work. We have had both such experiences in the Special School District of St. Louis County, Missouri. Successful vocational education for the handicapped is a matter of collaborative effort between the special educator and the vocational educator.

Special Education and vocational education in partnership should be able to add weight to the move sponsored by the National Society of Crippled Children and Adults to eliminate architectural barriers in public buildings. Progress is being made in providing assistance to the individual so he can overcome existing architectural barriers. Improvements in mobility equipment and in artificial limbs is making it possible to get the worker to the job.

Not only is job redesign necessary in many cases to capitalize on the abilities of the handicapped but education redesign, too, is necessary. I shall never forget the example I saw where two young adults who could not count to three without getting confused were pakaging 100 items per carton with great accuracy and great efficiency. The trick was to provide them with containers such that from the source of items to be packaged they could learn to pick up one at a time with one hand while picking up one at a time with the other hand an object from a pre-counted collection of 100. They continued this simultaneous transfer with right and left hand of one packagable item and one arbitrarily selected item until the pre-counted 100 items had all been removed from their original container. At that point they were taught to hold up on hand. The supervisor then appeared and provided a new empty carton to be packaged with 100 items, and reversed the cartons available to the other hand, so that once again they could start picking up one at a time from the packagable item bulk and one at a time from the pre-counted 100 items, and so the process continued. Actually these young men of very low mental ability were packaging 100 items per carton with far greater accuracy and speed than most normal workers could do. They never lost count. They never stopped early or put in too many and one supervisor could see that a dozen or more such individuals were operating efficiently. Vocational education and special education can develop techniques to prepare handicapped workers to utilize their assets and to assist industry in appropriate job redesign.

It is my hope that guidelines developed for vocational education of the handicapped would includ such as along the following: (1) funds expended for instructional purposes should be subject to the condition that a collaborative design exists. This collaborative design would include expertise as symbolized by certified personnel from both vocational education and special education as warranted by the nature of the handicapping conditions. We would not be concerned so much as to where the vocational education of the handicapped occurred but as to its content. It would be appropriate to place certain individuals part-time or full-time in a vocational technical high school, but only if there is continuing participation of a special educator. It would also be appropriate to employ vocational educators, such as vocational home economics and industrial arts or industrial education certified personnel, and provide the vocational education experience in a physical facility containing only one or more types of handicapped young adults. By virtue of the vocational education certification of the individuals concerned, vocational education expertise would be covered; and by virtue of their placement in a physical plant where a program for the handicapped was being conducted, special education would be represented by certified personnel.
(2) Funds for equipment, building, transportation, and other non-instructional aspects of the program should be expended for the handicapped only after approval by persons with expertise relating to the needs of the handicapped.

The potential for economic productivity of most handicapped persons is far greater than has generally been realized by the nation or any of its components. It is true that a segment of the handicapped is not likely to be economically productive. Those who are grossly handicapped and of a profound degree of incapacity may require care and custody, but this represents a small percentage of the several million Americans who are now included in the definition of handicapped.

Communities, have heavy responsibilities facing them in maintaining the highest level of education for all its young people. All educators have a committment to design and operate educational programs to educate and train young people (handicapped or not). Educational specialists such as vocational educators and those sophisticated and skilled in working with the handicapped must join their resources to this end. It is my conviction that working together vocational education and special education can find here a great challenge and a great reward. It is to be hoped that vocational education appropriations for 1970 will be significantly higher than those proposed in the budget. It is understandable that vocational educators might find it difficult to incorporate the handicapped in their plans even with extra funds being provided, but it is indeed difficult to contemplate doing this job effectively when it may have to be done with less funds to carry on programs already in existence than heretofore were either available or contemplated.

There is one thing of which I am confident. It is that the special educators of the nation are ready and willing to collaborate with vocational educators in carrying out this mandate. I should like here and now to record the readiness of the Council for Exceptional Children and its various state and local branches and chapters as being a source of help to vocational education, on call and ready to identify competent professionals who may be most helpful. Surely, the experience cited here and the many others that could be cited, from industry, from government and from other walks of American life testifying to the wealth of productive skill on tap in the reservoirs of the handicapped, is sufficient to convince the most skeptical that further and improved vocational education of the handicapped is an essential national investment.

SPECIAL SCHOOL DISTRICT of St. Louis County, Missouri

READINESS EVALUATION CHECK LIST Date Completed____________

Name________________________________ Social Security Number____________
(Last) (First) (Middle)

Birthdate______________ Sex_____ Race__________ Telephone Number__________

Address____
(Number) (Street) (City) (State) (Zip Code)

Parent(s) or Guardians (specify)______________________________

Form filled out by (teacher's name)____________________________

District________________________ School________________________

Current Status:
Adol. II (final year)_____
Adol. II(next to final year)_____
MDE_____
TMR_____

Previous Job Training or Work Experience
(including in school)
____
____

Approximate height ________; Approximate weight__________

Please check in the spaces the statement best describing the individual as compared with other youngsters of approximately his (her) age and mental age.

	Well Above Average	Above Average	Average	Below Average	Well Belo Avera
OUTPUT (PRODUCTIVITY					
COOPERATION					
EFFORT					
CAUTIOUSNESS - SAFETY CONSCIOUSNESS					
ACCURACY AND CONSISTENCY IN					
FOLLOWING DIRECTIONS					
DEPENDABILITY:					
Attendance					
Promptness					
Independence					
Awareness of time					
EMOTIONAL CONTROL:					
Concentration					
Perserverance					
Steady rate and adaptability					
New task; two or more tasks at once					
SELF-CORRECTION					
ACCEPTING AUTHORITY					
RELATIONSHIP WITH OTHERS:					
Sociability					
Team work					
Challenged by competition					
PHYSICAL STAMINA					
VERBALIZATION - Self-expression					
PERSONAL APPEARANCE - Grooming					
MEMORY					
MANUAL DEXTERITY					
CHOOSING - Decision-making					
SPEECH					

*Describe

VISION: Seems normal without glasses____; with glasses____.

*Seems to have vision problem without glasses____; with glasses____.

Readiness Evaluation Check List

MOTOR LIMITATIONS:

			Normal Normal	Mild Limitation	Severe Limitation
A. Upper Extremities	Hands	- Right			
		Left			
	Arms	- Right			
		Left			
B. Lower Extremities	Feet	- Right			
		Left			
	Legs	- Right			
		Left			
	Hips	- Right			
		Left			

Other Physical Deviations:

Has he used public transportation independently? Yes_____, No_____; if no, do you think he is capable of doing so? Yes_____, No_____

Does he have a Missouri Driver's License? Yes____, No____; own a car? Yes____, No____

Can he: read? Yes____, No____; write his name? Yes____, No____;

write simple messages? Yes____, No____; tell time? Yes____, No____;

make change? Yes____, No____; do simple counting? Yes____, No____.

arrange alphabetically? Yes____, No____;

arrange serially by number? Ues____, No____; tie knots and bows? Yes____, No____

use a telephone? Yes____, No____; use weighing scales? Yes____, No____

do simple sorting as by color or size? Yes____, No____

do simple cleaning? Yes____, No____; read simple guages and dials? Yes____, No____

locate or identify things by number, color, etc.? Yes____, No____

use simple hand carpentry tools? Yes____, No____

use simple hand sewing equipment? Yes____. No____

use a typewriter efficiently? Yes____, No____

Does he adhere to acceptable standards of public behavior? Yes____, No____

Can he fill out an application blank properly? Yes____, No____

METROPOLITAN ACHIEVEMENT TEST SCORES - Date____________________

Word Knowledge____________________ Reading____________________

Spelling____________________ Arithmetic Problem Solving____________________

What is his vocational goal(s)?____________________

Is his vocational goal(s) realistic? Yes_____, No_____*

*If No, why?____________________

Please note factors in this pupils life or home which contribute to or detract from his progress:____________________

Teacher: Prepare original and a carbon copy upon request of Job Placement Consultant; forward original to M.R. Dept. at Central Office; place carbon copy in pupil's school file (central office will place original in pupil's file; place a photo-copy in Job Placement file, and send a photo-copy to WEC on referral.)

MR JRECL 67

IMPLEMENTING PROGRAMS TO SERVE THE HANDICAPPED: SOME CONCERNS AND CONSIDERATIONS

by

Jerry C. Olson, Ph.D.

"Never before has attention to the individual been so imperative."[1]

The problems which harass America on every front places great burdens on all of the social institutions. The schools, responsible for the largest share of the educative function will be given responsibility of astronomical magnitude to assume a larger role in searching for ways to develop and execute its mandate to educate "all of the children of all of the people" for a personally meaningful life in a society shaped to the needs of a free people.

The reshaping of educational processes led to highly developed specialties. The requirements of a complex technologically based society, both industrial and agricultural, ultimately was reflected in the emergence of a vocationally oriented education. Vocational education has been increasingly recognized for its contributions to the personal and social economic well begin of our people. But broadly conceived programs that meet the needs of a significantly large body of heterogeneou students have long eluded vocational education. For many vocational educators, the goal of meeting the needs of large numbers of students has not been compatible with the change of preparing quality skilled manpower since the Smith-Hughes Act of 1917.

An examination of some of the concerns and considerations which may reflect the views of educators who will implement the intentions of new federal legislation will focus on: (1) legislative background; (2) handicapped students; (3) organizati and operational considerations; and (4) education program development.

Some of the concerns will be stated explicity while other are implied. Flow charts of the underlying structure charts appear in the Appendix.

General Report of the Advisory Council on Vocational Education, 1968.

FEDERAL LEGISLATION

The intentions of the Vocational Education Act of 1963 began the change in vocational education philosophy by inferring that this is a job for all who can be trained. The Vocational Education Act of 1963 did not put an end to the rigid vocational categories established in earlier legislation, but interpretations of the categories were broadened and the states were permitted to use the funds from the Act in a manner to gain flexibility. Public Law 90-576, the Amendments to the Vocational Education Act of 1963, increased the flexibility and almost completely dissolved the vocational categories that too often caused internal power struggles and fragmented educational opportunities. In addition to the problems created through the amalgamation of service areas, new problems were added by requiring "at least 10 per centum of each state's allotment of funds appropriated under section 102(a) for any fiscal year beginning after June 20, 1969, shall be used for [vocational education for handicapped persons]."

The implementation of the Vocational Education Amendments of 1968 for handicapped who cannot succeed in Regular Vocational Education Programs include: Mentally retarded, hard of hearing, Deaf, Speech impaired, visually impaired, seriously emotionally disturbed, crippled and other health impaired persons. Vocational funds for programs and services that serve handicapped students may be identified in the following four categories:

I. Classroom Related Academic Instructions
    a. Remedial Instruction
    b. Communications Skills Training
    c. Reader and Interpreter Services

II. Employability Skills Training
    a. Classroom Related Technical Instruction
    b. Shop, Laboratory, Field, Cooperative Work
    c. Other Occupational Experience

III. Individualized Services

  a. Guidance & Counseling
  b. Diagnostic Services
  c. Special Transportation Facilities & Services
  d. Special Education Equipment, Services & Devices

IV. Individualized Programs

  a. Special Instructional Program
  b. Pre-vocational Orientation Program

HANDICAPPED STUDENTS

Selection

Individuals falling at the extreme ends of a continuum in the measurement of any aspect of psychological and/or intellectual functioning have presented considerable problems to educators and educational institutions throughout history. Perhaps the population that has caused the greatest concern to these interested groups are those individuals who typically fall at the lower end of the continuum or minus two standard deviations away from the mean in terms of intellectual functioning. These individuals, depending on a particular society at a particular time, may be termed mentally retarded or mentally sub-normal. Many professional groups are concerned for the mentally retarded and we find many different definitions of the term. We find that different disciplines have defined retardation in terms of their own specialty. This is a particularly important question for vocational educators who are preparing individuals for gainful employment. Vocational educators must have a clear sight on entry level employment standards and have the flexibility to change their goals and programs to meet the needs of the business-industry community. It is possible to find an individual retarded from a medical or social standpoint but who need not be considered retarded in terms of vocational skills for which he may prepare himself and carry on a productive working life.

The demands of our present technological society have made it increasingly difficult to place individuals into neat rigid categories. Educators are asked continuously at an ever increasing rate, to look at people as individuals and determine their strong points in those areas that they can develop abilities. Many of the concerns and considerations that will be expressed here are relevant to total education and not necessarily unique to vocational educators. We found that the great institutions in our society have been highly selective and attribute much of their success to this selectivity. However, the emphasis today is being placed on educating everyone and in finding a job for everyone who can be educated. It is noteworthy that the General Report of the Advisory Council on Vocational Education published in 1968 placed great emphasis on bridging the difference between man and his work, and on placing much responsibility on educators to identify individual needs.

The initiation of psychometrics by Binet in Paris was brought about through the motivation to screen out children, rather than screen them in. As early as 1904, when Binet completed his work, discrepancies in urban children were so manifest that he was able to ferret out the atypical, with an instrument, based on questionable assumptions and statistical techniques. Unfortunately, school districts, psychologists, and social agencies still perpetuate the aura of Binet by making predictions of total potential on the basis of psychometric measurements which do not take into account the meriad of factors which are psychodynamic and aptitudinal, yet are generic to global intelligence. We predict as if measurement of cognitive functioning in an hour is multi-dimensional, and not only predicts academic potential, but social, economic, occupational, and psychological potential. This value distinction is rather naive and extremely unproductive in terms of preparing individuals for employment in our society today, when studies point out the higher incident rate between poverty and retardation.

HANDICAPPED STUDENTS

Educational Experiences

The entire question of the purpose of education and developing of responsibilities in individuals must be a consideration of vocational educators. Education must be viewed as a process of providing instruction for individuals and not necessarily demanding they meet a pre-determined set of standards. The competencies developed through educational experiences must be clearly defined and understood by the individual and the employer. Educators must decide how much freedom and how much responsibility they will give each individual student in terms of determining his future and in educating himself to prepare for it. Many handicapped students have overcome their malfunctions, have learned to become productive in spite of these and, function adequately in our society. Handicapped students are capable of learning a variety of skills. It appears that educators have some decisions to make with reference to providing educational experiences for students. They may group students into a very rigid track system made up of programs for slow learners, regular learners and enrichment program for fast learners. They may provide a flexible program designed to meet the individual needs for each student.

HANDICAPPED STUDENTS

Placement

It is clear that mental subnormality and the criteria for diagnosis are as much related to the influence of a particular community at a given time as they are to cerebral disfunction. Simply stated, in terms of dire manpower shortage, a community could not afford to categorize or diagnose individuals falling below I.Q.'s of 75 as being incapable of functioning in an occupation. Conversely, in time of manpower surplus, a community might broaden its view and I.Q. range for operationally defining mental subnormality, in order to screen out those individuals who might be termed atypical in terms of intellectual functioning.

In 1968 our unemployment rate was the lowest since 1953. During that year, the average unemployment rate was 3.6 percent and 1.4 million entered the civilian labor force. This relatively low unemployment rate substantiates the fact that business and industry are interested in placing as many individuals as possible and have jobs for those who are prepared. This may explain why we have seen increased emphasis in federal funds to accomplish the vast task of preparing more individuals with saleable skills. Studies have shown that more than 50 percent of all subject matter necessary to qualify for entry-level employment is common throughout all the jobs within an occupational family grouping. Other findings indicate that licensing and certification boards have maintained extremely high standards and have screened out many potentially effective students. Couple this with the fact that over fifty percent of high school graduates are continuing their education beyond high school and one can determine a range of spin-off employment points within a cluster of the occupational grouping. There are job opportunities in all ranges of sophistication available to handicapped individuals today and it is not necessary that all the handicapped find employment in the typical jobs earmarked for them, namely, custodial service for hospitals, motels, hotels and schools; food services in hospitals and commerical establishments; sanitation and street and park policing. Each learner must be guided and be receptive to the idea of the infiniteness of learning, the ability to make decisions and the aspirations to contribute to society.

ORGANIZATIONAL AND OPERATIONAL CONSIDERATIONS

National

Vocational educators are concerned that it is becoming increasingly difficult to analyze the federal budget for vocational education because the U.S. Office of Education has placed the responsibility for administering certain parts of programs in the Bureau of Adult, Vocational and Library Programs in other Bureaus and Offices, e.g., Office of Program Planning and Evaluation and the Bureau of Educational Personnel Development and Research. They are concerned that the vocational education budget for the fiscal year 1970 showed an authorized amount of \$812,500,000 whereas the budgeted amount is \$279,316,000. This may be compared with the fiscal year 1969 allotments of \$209,630,000. The grants to states, Part B, reduced from the authorized amount of \$508,500,000 down to \$234,216,000. Ten percent of this money to be utilized by the states for handicapped students reduces the allotment from an authorized amount of \$50,850,000 to \$23,421,600. As presently budgeted, this amount is to be matched by state and local contributions and will, in fact provide \$46,834,200 of the vocational funds to be expended for the handicapped.

There is a possibility that this figure could increase if some $300,000,000 in other offices and agencies were to be transferred to the U.S. Office of Education's Bureau of Adult, Vocational and Library Programs. The emphasis on implementing the human resources aspects intended in the Act and the Amendments will definitely place a burden on vocational educators who had hopes of building even greater quality into existing and expanding programs. Many of the resources provided by the Vocational Education Act of 1963 went into "brick and mortar costs." Much of this construction is presently being completed and the new facilities will add new and additional operating costs. Many vocational educators at the state and local levels planned to use the expanded federal resources to cover the spiraling operational costs. It is indeed unfortunate that the total amount authorized is not budgeted and that programs for the handicapped cannot be implemented without some vocational educators feeling that these monies could have been more wisely spent on building quality programs of the traditional nature. Vocational educators are now faced with the problem of continuing to gear their efforts to an industrial and service occupation rather than on occupations for an agrarain economy that once existed. At the same time, they must increase their sophistication in the technically skilled areas and provide programs for a much wider range of individuals, including the handicapped.

One can examine history of vocational education and find that its growth was stimulated by federal appropriations for the training of highly skilled craftsmen. Over the years we find that even though vocational education has provided the skilled workers, they have also come under a great deal of criticism generally. This criticism probably stems from the educational separatism that was generated with the Smith-Hughes Act of 1917, which created categorized spending for vocational education. The opponents to the original 1917 Act predicted that once this aid was started the government would be saddled with this burden forever. Control of the money was a critical issue from the initial funding in 1917. The regulations in the Smith-Hughes Act provided for the appointment of a Federal Board of Vocational Education to administer the provisions of the Act. This was a seven member Board which consisted of the Secretaries of Labor, Commerce, Agriculture and the Commissioner of Education. This is pointed out to emphasize the role that Labor, Commerce and Agriculture have placed in providing funds for vocational education and ultimately the manpower for the country. State Boards of Vocational Education were developed soon afterwards to reduce the complexity of dealing with many local school organizations. The intent of the first Act was to provide separate vocational programs in addition to the types of manual training experiences one would find in the average high school. The Department of Labor, particularly, had a great deal to do with contributing knowledge and service toward effective program growth during the early years. The problem of control was a big problem in the beginning of vocational education and still is an issue that causes much concern.

The relationship between vocational education and the school system generally has been a concern through the years and is still foremost in the minds of many people. This problem was stated by William T. Bawden when he stated, "We learned our lesson once and we are not going to permit the traditionally minded superintendents and principles to do to vocational education what they did to the manual training movement. We intended to stay away from [the public schools], keep our vocational education separate and independent and thus avoid any grounds for suspicion that vocational education will ever be dominated by general education."[2] In 1954 the problem still existed between separate educational systems and total public education. Even as recently as May 1968, we find C. Thomas Oliva discussing this point in his presentation "The Evolving Stature of Vocational Education with Implications in the Total Educational Enterprise." He refers to the comprehensive high school and states, "Another professional myth is that the comprehensive high school is the vehicle for providing vocational education. As it relates to trade and industrial/ technical education, this is a myth. Nowhere is there a comprehensive high school to be found in this country within the context of the vocational program and its relationship to general education that I have presented."[3]

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[2] William T. Bawden, Crisis in Vocational Education, Industrial Arts and Vocational Education Magazine, Volume XLIII, No. 9, November 1954, page 296.

Vocational education has been receptive and respondent to the issues facing the nation. During the economic collapse of the 1930's, which precipitated the depression, the problems of the unemployed and their relationships to vocational education were closely studied. Unemployed adults were admitted into existing trade school programs and provided instruction along with day-school students. A lack of vocational curriculum materials in the late '50's brought attempts to develop uniform terminology and form a clearing house for resource materials of all types. This was done in order to stimulate the development of appropriate materials to implement the technical programs encouraged by the National Defense Education Act of 1958. Vocational education rose to the test of developing new curricula materials and implementing programs to strengthen the national defense.

In the latter 1960's American society is faced with a crisis in urban education, many social and cultural problems and the need for skilled manpower of many levels. This is the challenge facing vocational education on the national scene today. Vocational educators are faced with a totally new set of circumstances which they have never faced before as they attempt to implement programs for handicapped youth. Their success will depend, to a great extent, on cooperating with others in education and in replacing their hard and rigid separatism attitudes with a cooperative, sharing of responsibility and flexible programs. This abolition of separatism and emphasis on the combined educational effort began in the 1930's. In 1933, the functions of the Federal Board for Vocational Education were transferred to the Department of Interior. At that time, the Federal Board ceased to be an important force in Vocational Education. By executive order the administrative functions of the Federal

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[3] C. Thomas Olivo, The Evolving Stature of Vocational Education with Implications in the Total Educational Enterprise, The Council-Gram, Report of National Council of Local Administration, May 1968, page 12.

Board for Vocational Education was changed to the Assistant Commissioner for Vocational Education without any change in duties. The Federal Board was abolished by the executive order of President Truman on May 16, 1946, and its advisory role, power and control were absorbed in the U.S. Office of Education functions.

The federal government has had two main concerns down through the years and these have been documented and supported by the American Federation of Labor, U.S. Chamber of Commerce, National Manufacturers Association and others. The concerns have involved the efforts to providing the country with skilled manpower and providing opportunities for dependent persons who desire to upgrade themselves and become literate individuals. It was deemed essential immediately after the first Federal Vocational Act to insure that vocational education be guided by men who were very close to the problem of agriculture, industry and labor. As it became a part of the Office of Education we found educators with different points of view and varied attitudes about it but, as pointed out, it did not lose its effectiveness and has been a powerful force in preparing skilled manpower for the country through the years. The very transfer of the power and control from the Federal Board of the U.S. Office of Education left some skepticism in the minds of many vocational educators and many industrial leaders who were not sure of its acceptance or respectability at the U.S. Office of Education. With the emphasis being placed on educating the individual and the total human being, vocational education will be asked to maintain its balance, prepare all individuals with saleable skills and continue its efforts and strides made over the past years. Vocational educators have proven their effectiveness under pressure in the past.

Liability problems involved with educating the handicapped must be considered. Obviously, a sound educational program would tend to do much to overcome these fears, yet there are certain instances when the teacher, parents and handicapped students may be apprehensive about performing a specific function or operating a machine. There is a great deal of emphasis on safety and liability today. State courts and State legislators are gradually getting away from the concept of government immunity. More teachers are finding themselves becoming party to suits that occur in shops and laboratories. This occurs most often when the teacher may be proved negligent. To negate this, it would be necessary to design safety devices and educational equipment of all types for the individuals with unique problems. The question remains that if we are going to provide a relevant education for handicapped students and assist them in developing saleable skills much work must be done.

A brief history of the liability suits indicates that in 1960 and 1961 there were a total of 52 school districts and approximately nine shop teachers who were involved in cases that reached a court of record. There were obviously many others who were tried in the lower courts. Teachers are concerned about their personal and professional reputation and parents may be unwilling to have their students participate in some programs. We need a type of program that would insure that the pupil would be adequately protected, and that the school district and the individual teacher would be protected. This might be accomplished by a modification of workmen's compensation that would allow the awarding of some reasonable compensation if an injury did occur. There has been a plan proposed by Dennis Kigin from Arizona State University which advocates the establishment of a modified workmen's compensation that would involve pupil remunerations for school-related injuries. If such a plan could be developed it could solve some of the problems of liability associated with school shop injuries. A workmen's compensation would take the guess work and uncertainty out of the problem and protect the student, teacher and the school. A modified workmen's compensation, sponsored by the State Department of Education, who would act as a self-insurer for the entire State, could do much toward helping solve the liability problems in shops and laboratories generally and certainly those involved with the education of the handicapped. This is a very real concern of vocational educators and must be placed high on the priority in attempting to implement programs for the handicapped.

ORGANIZATIONAL AND OPERATIONAL CONSIDERATIONS

State

Many state vocational educators in an attempt to comply with the intent of the Act may tend to implement programs for the handicapped similar to those of Diversified Occupations which are found in many states. In this program, handicapped students would receive little or no practical experience in shops and laboratories before going on the job. They are identified and placed with a teacher or teachers for their in-school related experience and spend the remainder of the day in a supervised "on-the-job" experience which would require little or no previous experience and knowledge. Such a scheme could dead-end many students if they were not given the opportunity to perform in a specially adapted vocational program for handicapped students first.

The separatism in vocational education which has been prevalent through the years has enabled a separate administrative hierachy to become established. The advent of area vocational technical schools and the struggle over administrative staff to administer the total program still remains a problem in vocational education. Some vocational educators feel the interests of vocational education would not be upheld if a general school administrator was in charge of implementing the program. The same anxiety would probably prevail if specialists in implementing programs for the handicapped were involved in policy decision roles in vocational education. Many area vocational technical school teachers and administrative staff have high standards and feel that all students must meet a given set of criteria for entry and graduation. They would not support the theory that there could be program "spin off" even though an individual had reached a level of competency, commensurate with his abilities, that provided him with a saleable skill for which there were employment opportunities. Many vocational educators have lumped everyone beneath this one top level into one generic category and have attempted, in some instances, to implement programs for these individuals but have not termed it vocational education. Some say it is occupational education, others say it is part of the comprehensive high school and really not vocational education. There are many reasons given for this arrangement, but the most prevalent is that vocational education is a distinct educational speciality and must maintain the reputation of its title and the individual teacher's image with the industrial community.

ORGANIZATIONAL AND OPERATIONAL CONSIDERATIONS

Local

Vocational educators have prepared some handicapped individuals to be gainfully employed. Some of the on-going vocational programs have included deaf individuals and physically and mentally impaired individuals. Also certain vocational educators use their skill in teaching at schools for the blind and schools for the deaf. Vocational Educators have had some experience with educating the handicapped but, for the most part, have not been heavily involved.

All administrators at the local level must be resourceful and know where they can go for help beyond the kinds of preparation that can be provided in the local school district. Local administrators should work closely with the Bureau of Vocational Rehabilitation and other agencies. This will increase their load in an already over-crowded schedule and will cause some constraint. Advisory committees should be established at the local level and people with experiences in educating the handicapped should be included in the planning and evaluation of the program. Possibly there is some skepticism as to how long the emphasis on the handicapped will remain. Vocational educators will undoubtedly wonder how much time and effort should be placed in this area in terms of tooling up their shops and laboratories, preparing their teachers and developing new curriculum materials. Obviously education must strive to have the flexibility to adjust to the needs of the society and to implement programs that are needed. The area vocational technical schools have been developed over the past several years have greatly increased program opportunities for many more students, but they still do not meet the needs of a significantly large number of students. The General Report on the Advisory Council on Vocational Education in 1968 indicated that the enrollment increase for the three years that the Vocational Education Act of 1963 has been in operation, 1965 through 1967, was about 300 percent larger than the enrollment increase for the three years prior to the implementation of the Vocational Education Act of 1963. In 1968, for example, there were 6,994,240 students involved in vocational education. This was compared to a 1962 figure of 4,072,677. In 1966 we found 3,048,248 students in secondary edcational programs out of a total vocational enrollment (including adults) of 6,070,059 students. To fix the impact of vocational educators presently, it is noteworthy that 25.4 percent of the students in public secondary schools, grades 9 through 12, were enrolled in vocational education in 1966. One million eight hundred thousand were involved in home-making home economics and 1,200,000 in office preparation and over 1,200,000 in trade and industrial education. Many of the students, however, who are participating in area vocational technical schools are screened and selected very carefully. The emphasis on involving a more heterogeneous body of students, including the handicapped, in vocational education is made explicit by the Amendments to the Vocational Education Act of 1963 would markedly change the emphasis that counseling and selection officers would use in selecting candidates for area vocational technical schools.

PROGRAM

Development

Vocational educators will face a problem in developing programs suited for the handicapped. They have not had much experience and will need to adapt existing and on-going curriculum that suit the needs of the handicapped. There needs to be flexibility in program development that will enable the teacher to individualize instruction. Education, generally, needs to develop an overall educational program that can be adapted and changed to meet the needs placed upon it. We could learn from physical and occupational therapy by examining on-going programs and findings in these fields. The implementation of the results found in these fields could help the handicapped individual overcome some malfunctions and enable him to become an independent self-sufficient member of society. It will mean much work and coordination on the part of vocational educators and therapeutic specialists.

Implementation

It is clear that the mentally subnormal group is heterogeneous and resultant incidence and prevalance in terms of operational definition. Even if this were not so, programming for this group in a homogeneous manner is perhaps as unproductive for them as for any other segment of the population. There is a tendency to view students in generic and simplistic ways. This probably has some bearing on the fact that education is viewed by some, as beneficial for its disciplinary values. Possibly that is why one finds that controls are placed on students to measure up to certain standards in each discipline. Little attention is given to program synthesis and much attention is given to viewing the student's learning experience as non-verbal or quasi-related learning functions. This orientation allows for more insight into the structure and orientation of the school district and its personnel than it does the students to be serviced.

Some school districts are operated in such a way as to suggest that the greatest majority of students require heavy doses of prescribed academic experiences to prepare them for additional learning experiences. Unfortunately this orientation provides experiences which have little relevancy to 70 percent of the population of any school district. The people at the lower end of the less gifted, are presented with a series of academic, and in some circumstances, vocational preparation which has little relevancy to the lives they will lead.

To those engaged in vocational education the problems of educating up to 70 percent of any school district's population does not fit with the newly conceived role of preparing students of intellectual qualifications for technical jobs after graduation. Although this orientation has merit for the brighter student it essentially closes program alternatives off to students who are not capable of functioning at such highly technical levels. Sometimes, the goal of the vocational educator seems to be more related to gaining respectability than the preparation of youth for the lives they will lead after graduation. Handicapped students have, historically, been denied relevant academic and vocational experiences in secondary schools, and a separate sub-system for the handicapped has been built up. It has its own armaments and organizational structures to combat this situation and to respond to the needs of exclusively handicapped students. It is questionable whether the academic experience at these levels are relevant and generic to the lives they will lead and whether students are productively engaged by having them perform psycho-motor activities which may be far below their potential while screening them away from the benefit of interaction with normal children. If steps are not taken to correct the situations, the limitations of separatism in education could be perpetuated by federal and state regulations and legislation. The interpretation of the intent of the Law is critical. School districts often build area vocational technical schools for the intellectually capable, special skill centers for the mentally sub-normal, scholars programs for intellectually gifted and programs with great ambiguity and little direction for the majority of students. It is interesting also to note that all of the programs function as if they were housed in separate agencies in dealing with different specifies of human beings. The results and effect of this is a most unproductive loss of the entire community in terms of its total resources since there are many areas in which administration program conduct might benefit by sharing common resources and knowledge.

It is possible to place money and emphasis on a specialized area and get results but these are often fragmented and do not help a significantly large number of students who need it. Possibly, the specialized programs should be developed and implemented after the handicapped students have had an opportunity to perform in adapted on-going vocational programs and have not achieved success.

Mayer[4], in 1966, pointed out the effects of education on the individual when he studied the relationship of early special class placement and self concept. His hypothesis that early placement in special classes develops more positive self concepts was not supported in his study. Obviously, handicapped students will require some specialized kinds of instruction but we also know that there are some individualized types of instruction very prevalent today which will help the handicapped. Johnson[5] concluded that the use of program construction techniques, in conjunction with additional teaching, may be more effective with the educable mentally retarded than the use of conventional approaches. In this way, it is easy to support Bijou who feels that the mental retardation should be viewed "not as a symptom, but as a form of behavior."[6] This fact must be clearly understood because in our urban centers today, figures of as low as 20 percent, and others as high as 30 to 35 percent, of the individuals have I.Q.'s below 85 and are functionally literate. It will take much organization using flexible scheduling and modular curriculum building if vocational educators are to include handicapped students in their programs. And, it will require some physical plant changes. The implementation of the programs will be the key to the success of the program, but will also cause some of the most serious concerns for vocational educators. It not only involves educational and physical adjustments, but additional changes and tolerance for the complex problems in handicapped students as they struggle to learn.

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[4] Mayer, C. Lamar, "The Relationship of Early Special Class Placement and the Self-Concepts of Mentally Handicapped Children." Exceptional Children, 33:77-81 October, 1966.

[5] Johnson, Gordon Floyd, An Investigation of Programmed Procedures in Teaching Addition and Subraction to Educable Mentally Retarded Subjects. Dissertation Abstracts, 27:4132A; No. 12, 1967. (Doctor's thesis. Eugene, Oregon: University of Oregon, 1966, 328 pp.

[6] Bijou, Sidney W. "The Mentally Retarded Child." Psychology Today, 2:46-51, June 1968.

PROGRAM

Management

It appears that whatever approach is taken to educate the handicapped there must be one educational administrator in charge. Without centralized management there can be fragmentation, uncoordinated efforts leading to inferior education and training. The effort cannot be a part-time one; we must accept the individual whatever his problems in all of his endeavors, including the general education and the vocational education aspects of the program. We know full well that the Mental Age of the 13 or 14 year old handicapped person may be 11 or 12 and we have much to learn about educating those students who have different learning rates. We know that many of them can benefit from educational experiences even though it will take them a longer period to do so. It will also take them longer to become oriented to the various aspects of shop and laboratory operations. A flexible instructional program, with extreme care given to the management of the program is imperative. The functional retardates will progress in varying degrees, at a varying pace and serious consideration must be given to managing the activities of each individual within the class. If special education were expected to do the job of vocational education alone or if vocational education was expected to do the job of educating handicapped students alone, we would find there would never be enough resources or educational sophistication to educate the relatively large number of students who need modified vocational education. We must attack the problem on several fronts at once and we must begin immediately. We are concerned with building quality within each individual that is commensurate with his ability. This can only be achieved by combining the compartmentalized sophistication of educators, both special and vocational.

The implementation and management of the intent of the Act might have been an impossible task during certain times in our history. However, in the latter 1960's with emphasis on the individual, on vocational education and on maximizing this country's human resources, the tasks identified for vocational education are completely relevant and appropriate. Vocational educators must be provided the money to provide the impetus for enabling them to carry on their quality programs in preparing skilled manpower for this country and to take on a new task of providing a relevant education for those handicapped and disadvantaged students in their population. It will take much in-service training and preparation to prepare the curriculum, to implement the programs and to manage the individualized instruction that remains ahead, bringing the intent of this Act to fruition.

The key to success in this new venture will probably be found in the plans which will emerge in the several states. These plans will need to incorporate the tested principle of sound education from every sector of school systems. The extent to which local educational leadership can tailor their schools to meet the challenges inherent in the Act for vocational and special educators to work effectively to enhance the dignity and well being of each young person, who wishes to work on a job, however humble, so that he can contribute to the commonweal. Indeed, it is imperative to attend to each individual.

Implementing the Vocational Education Amendments of 1968

Public Law 90-576

A

Student

(Who) Cannot Succeed in Regular Vocational Education Programs

Handicapped

(Why) Mentally Retarded, Hard of Hearing, Deaf, Speech Impaired, Visually Impaired, Seriously Emotionally Disturbed, Crippled
Other Health Impaired Persons - 10%

B

Programs & Services

(What) I - Classroom Related Academic Instruction
- a. Remedial Instruction
- b. Communications Skills Training
- c. Reader and Interpreter Services

II - Employability Skills Training
- a. Classroom Related Technical Instruction
- b. Shop, Laboratory, Field, Cooperative Work
- c. Other Occupational Experience

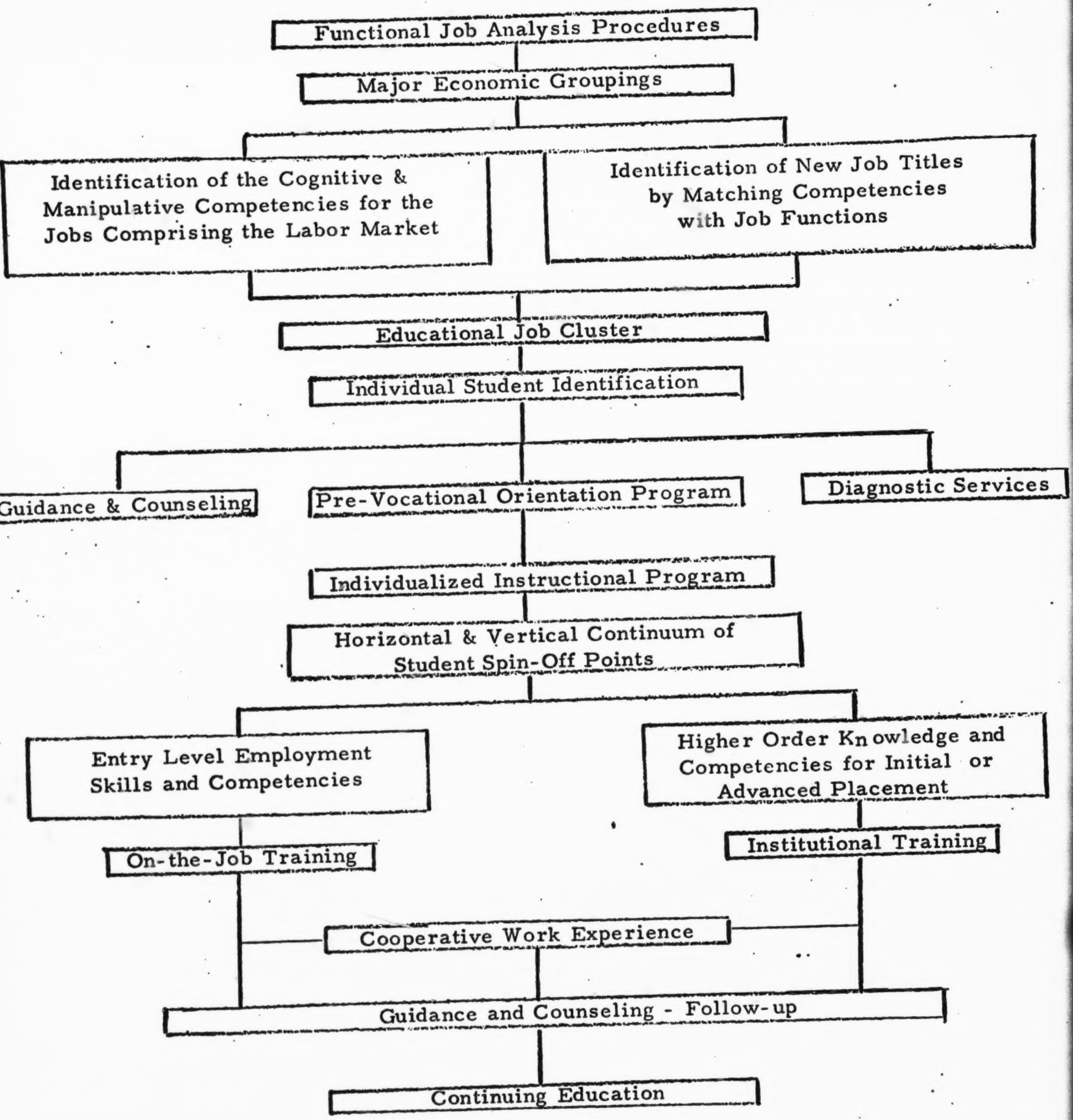
III - Individualized Services
- a. Guidance & Counseling
- b. Diagnostic Services
- c. Special Transportation Facilities & Services
- d. Special Education Equipment, Services & Devices

IV - Individualized Programs
- a. Special Instructional Program
- b. Pre-vocational Orientation Program

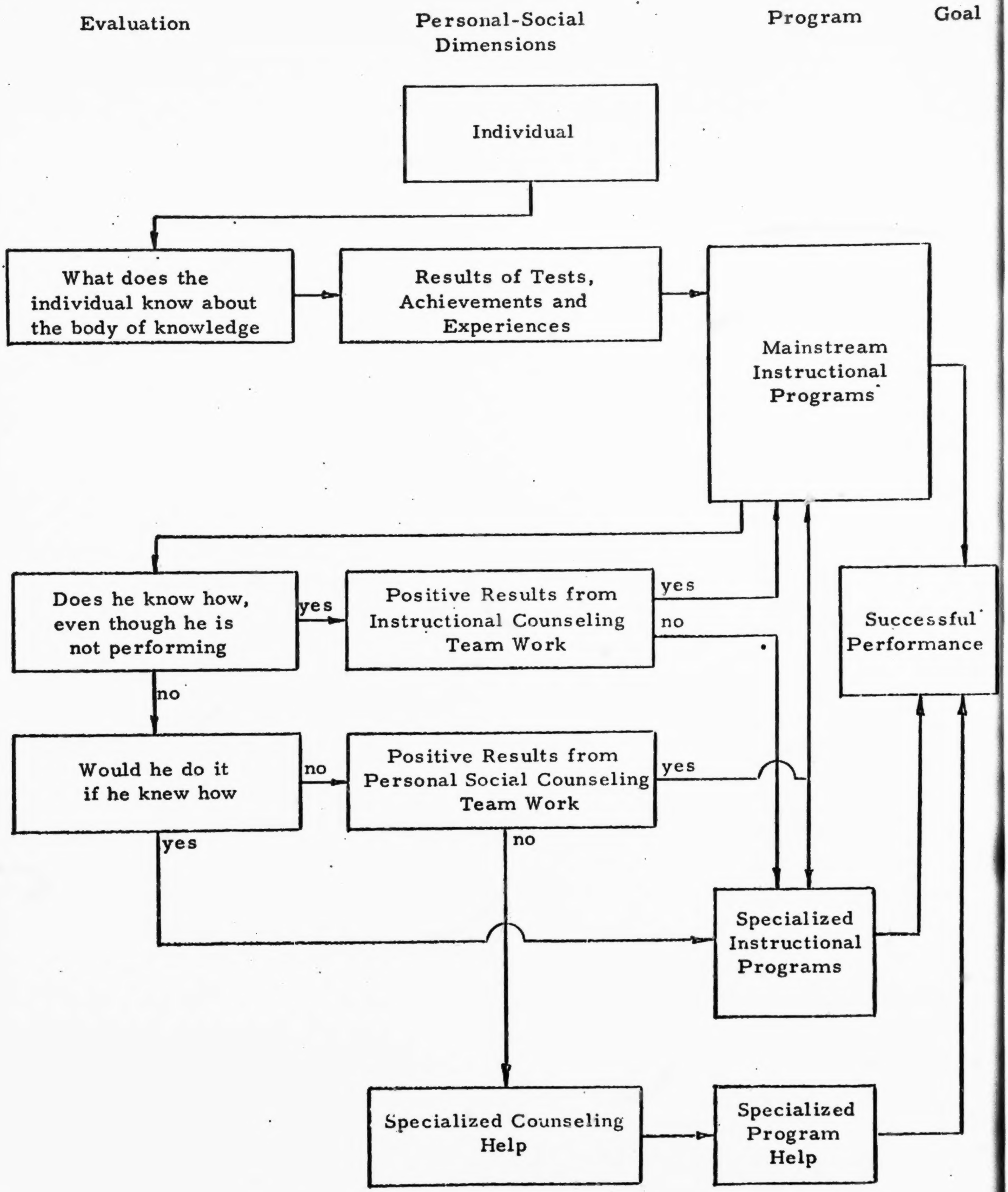
C

(Where) Employment in a Specific Occupation or a Cluster of Closely Related Occupations in an Occupational Field

Program Development, Implementation and Management


Functional Job Analysis Procedures
Major Economic Groupings
Identification of the Cognitive & Manipulative Competencies for the Jobs Comprising the Labor Market
Identification of New Job Titles by Matching Competencies with Job Functions
Educational Job Cluster
Individual Student Identification
Guidance & Counseling
Pre-Vocational Orientation Program
Diagnostic Services
Individualized Instructional Program
Horizontal & Vertical Continuum of Student Spin-Off Points
Entry Level Employment Skills and Competencies
Higher Order Knowledge and Competencies for Initial or Advanced Placement
On-the-Job Training
Institutional Training
Cooperative Work Experience
Guidance and Counseling - Follow-up
Continuing Education

A Flexible Comprehensive System for Changing Behavior


Evaluation
Personal-Social Dimensions
Program
Goal
Individual
What does the individual know about the body of knowledge
Results of Tests, Achievements and Experiences
Mainstream Instructional Programs
Does he know how, even though he is not performing
yes
Positive Results from Instructional Counseling Team Work
yes
no
Successful Performance
no
Would he do it if he knew how
no
Positive Results from Personal Social Counseling Team Work
yes
yes
no
Specialized Instructional Programs
Specialized Counseling Help
Specialized Program Help

LABOR AND INDUSTRY LOOK AT THE TRAINING AND PLACEMENT OF THE HANDICAPPED

by
Ralf A. Peckham, Ed.D.

Effective integration of the handicapped into the American work force may only be accomplished through the cooperation and tangible assistance of labor and industry. The indifference, and even hostility, that exists at present must be soon replaced with a commitment to full employment opportunity for all citizens eligible to work. Present social conditions in this country mandate that the conservatism and protectivist attitudes of organized labor and management undergo significant alteration to accommodate to the needs of the handicapped.

It would be unfair, however, to present this statement as an introduction to the problem without indicating that industrial preoccupation with matters other than the handicapped reflects the fact that professionals in the field have allowed their needs to remain relatively obscured. This paper will review the steps which have been taken to date to serve the handicapped and will recommend directions for future planning.

Let me illustrate.

Vocational Rehabilitation has been charged for the past 48 years to assist handicapped workers into the employment market. During that time, we have interested ourselves in various proposals to make possible the easier induction of handicapped individuals into the industrial market place, and to assure their maximum productivity once they are on the job. These interests are represented by such strategies as:

1. eliminating or mitigating unfair pre-employment examinations.
2. attempting to improve industrial accident insurance benefits particularly for those handicapped who possess an aggravatable type of disability.
3. seeking to have labor contracts consider plant-wide seniority clauses for the handicapped so that they are not bumped from a job that they can do to one that they cannot do.

Let me observe as a fact of life that organized labor--or certainly at the rank and file level--sees no commitment to struggle or bargain for those individuals who are presently not employed, and hence are not dues-paying members of their union.

Nor are they interested in bargaining for perquisites or privileges that would hold a disabled worker to a "plum" job when attrition hits the industry, and layoff time is at hand.

This is not to say that the rank and file worker is characterized by more self-interest than any other random grouping of individuals, but rather he merely reminds all of us that when we want to obtain meaningful solutions for handicapped people who additionally live in ghettos like those of Detroit, this is a program that we are going to have to fight for every step of the way.

Michigan's recent Governor--George Romney--knows all about the Detroit ghetto, and the need for its residents--handicapped or otherwise--to participate meaningfully in rebuilding homes, and bussinesses, and eliminating slumlordships over rat-ridden tenements. Now he speaks from the national scene as Secretary of Housing and Urban Development.

Governor Romney visualizes some 26 million new housing units in the next decade. . . and he has been hoping for widespread involvement of the hard-core populations entering the construction industry via the trade apprenticeship route.

So far, organized labor has been most cautious about any influx into its ranks from black, hard-core residents who, by the very nature of their situation, are troubled additionally with health and disability problems several times the frequency of their suburban neighbors.

But, let me spare organized labor from any further criticism.

At the conclusion of the Detroit riot, for a period of time, stunned silence. Then a positive reaction occurred. The New Detroit Committee was formed, consisting of industiralists and various community leaders representing all factions.

From the national level, one began to hear of the Urban Coalition and also about the National Alliance for Business. The New Detroit Committee pooled its energies toward a model plan that would strike hard at hopelessness, and despair, and which would rescue the unemployables, including the handicapped, and place them into jobs. It appeared as though a massive electro-shock therapy arising out of the riot had inspired the birth of a new attitude.

But did it?

There are some qualifications in the answer.

Yes, the big industrial shops did set up interviewing and outreach stations in and near the ghetto; certain screening tests were eliminated; and try-out employment was indeed offered.

Moreover, newspaper releases have been particularly enthusiastic in citing figures of many, many thousands being employed.

A closer inspection of hiring phenomena, however, seems to suggest that new hires often include the counting of racial minorities who are recruited from one plant to another as a result of job-upgrading offers. Also evident is a concentration of recruiting efforts on the "cream" of the poor from near the ghetto rather than on the real hard-core from the "city within."

When we send our indigenous workers back through the ghetto to report on whether or not these crash programs are bearing on the center of the target, we seem to get feedback that the major accomplishments are occurring elsewhere than in the ghetto.

In the fall of 1967, I was engaged in a research effort to assess the attitudes of employers toward the hiring of those kinds of individuals as possessed an aggravatable problem--such as a bad back or a cardiac condition. The salient conclusion of this study was that only about 42% of the employers would consider hiring this kind of an applicant. Their negative reason for doing so was that they faced a very costly insurance risk if the individual should aggravate the pre-existing injury through only a minimal provocation.

This attitude does have some validity mixed in with a certain amount of traditional prejudice. To protect the employer from undue insurance risks, I would encourage a publicly-supported insurance fund to relieve the employer of any catastrophic penalties.

But this is only a portion of perscriptive need.

Professional leadership, such as is present here today, needs to acquire a social militance of its own if the handicapped are going to find a place in our economy. We must somehow inspire organized labor to recapture the kind of realistic idealism that justified its immense impact upon the whole society back in the thirties. We must seize upon the new progressivism of modern industrial management and translate the Urban Coalition and the National Alliance for Business into that kind of a program that really means to deal with hard-core disability rather than to succumb to the temptation to claim solutions via statistical number games from the periphery!

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Two "New" Disabilities: Sociogenic Retardation and Sociogenic Neurosis

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COMPREHENSIVE VOCATIONAL PREPARATION OF THE HANDICAPPED: AN INTER-AGENCY PROBLEM

by
Salvatore G. DiMichael

The Vocational Amendments of 1968 make it possible to implement the concept of a comprehensive program of vocational education for the mentally and physically handicapped which provides for their ultimate employment. To attain a comprehensive program of vocational education, the school should become partners on continuous terms with all agencies working for, and with the handicapped in the community. This may mean that a complex and relatively "new world" must become well known, accessible and interrelated with vocational educators. In turn, agencies serving the handicapped should become thoroughly familiar, assistive and enriching to the "new world" of vocational education. Inter-agency programming may disturb present assumptions and practices and establish new patterns which may strain patience, and question their value. Out of new perceptions there should arise a readiness for interaction, and a readiness to make changes which are not only desirable and essential, but encumbent upon each community.

The concepts "comprehensive approach," "preparation and assumption of broad living," "total community," "continuum of services" and other slogans may sound utopian and unrealizable. Nevertheless, they are recognition of the purposes and objectives which we must implement under the provisions of the Vocational Education Amendments of 1968.

In this paper, we will seek to offer suggestions on inter-agency cooperation that will bring us nearer to the goals and place us in a position to improve on developments which begin modestly and become more effective as we gain experience.

State Planning

The Vocational Amendments of 1968 require state-wide planning with clear and identifiable provisions for the physically and mentally handicapped. The State Division of Vocational Education should use the results and resources of the state-wide plans already developed in such areas as vocational rehabilitation, special education and public health. The plans already have substantial facts, recommendations and suggestions of potential usefulness to prospective vocational education plans. However, there would have to be deeper probes into the foundations and character of the vocational education programs. The new impetus given to vocational education by the law has engendered fresh enthusiasm among public and private agencies for the handicapped at the state level. These agencies soon will be asking questions and seeking evidence of results in comprehensive vocational education for their handicapped clients.

I would strongly recommend that state-wide planning conference be initiated as early as possible with representatives of vocational educators, special educators, professional associations, public and private service agencies along with handicapped individuals and their families. Time could be devoted to an exposition of the new Vocational Education Amendments of 1968. Descriptions of existing programs of vocational education for the handicapped is an essential element for discussion. Suggestions of state organizations concerned with the various handicapped such as the retarded, mentally ill, crippled children, cerebral palsied, the deaf, the blind and others. State agencies such as vocational rehabilitation, employment service, and other groups such as labor and management will have much to contribute. A working conference of leaders at the state level is intended to (1) increase the information-base of all participants; (2) encourage inter-agency programming and (3) assist the State Vocational Education Department in the formation of a comprehensive long-range plan.

The results of these meetings should provide for better understanding of the scope, breadth, and variations in on-going vocational training for the handicapped. It should reveal existing gaps and point the way to new possibilities. Emerging programs should be characterized by flexibility, innovation and experimentation utilizing the combined resources of public and private agencies.

Specific plans and provisions for vocational preparation have to be drawn up for state institutions and facilities under state administration. These institutions need assistance and have to struggle within the confines of state regulations and a long tradition of a service preoccupied with care and custody.

Inter-Agency Programming in the Local Communities

The Vocational Rehabilitation Amendments since 1954 provided for research and demonstration, innovation, establishment and expansion of facilities. Rehabilitation leaders became acutely aware of the lack of vocational training facilities and programs. The events soon emerged as a dilemma. Should the rehabilitation program encourage and fund vocational preparation for adolescents who are retarded, emotionally disturbed, and physically impaired, or should it refuse to setup such facilities and bring increasing social pressure upon the fields of special education and vocational education? In the middle 1950's, the U.S. Office of Vocational Rehabilitation began to encourage and fund vocational training, job preparation and placement through a series of flexible patterns of inter-community agency involvement. This ushered in an exciting development of pre-vocational, vocational, sheltered workshop, and work-study programs which today attest to the wisdom of the decision. The Office of Vocational Rehabilitation found wide support for the developing programs in social agencies for the handicapped, in national, state and local associations for the retarded, emotionally disturbed, crippled children, cerebral palsied, turberculous, hemophiliacs, just to mention a few. Special educators concerned with a wide array of disabilities were enthusiastic, active, and influential in making things happen with surprisingly good results.

The field of vocational education must recognize these developments, acknowledge their committments, build upon them, improve and extend, and enrich the broad comprehensive program by involving community agencies. It would be a mistake for vocational education to develop a comprehensive program within the purview of its own establishment.

The patterns will need to vary from one community to another, from one area or state to others. One may speak of general patterns although generalizations are fraught with the hazards of error since facts and studies on a systematic state or national basis are sorely lacking. I have tried to be informed on developments because of my interests in the areas of special education, vocational preparation, placement and vocational rehabilitation. I am more confident about the wide range of variations in programs than about my knowledge of general programming patterns.

Two recent examples have increased my wariness. One relates to training in travel and mobility for the mentally retarded. It had become clear to me about 1955 that travel training was a necessary phase of vocational and adult preparation for adolescents classified as lower educables and high-level trainables. I sought to encourage schools to provide such training. However, most teachers and supervisors were fearful that the schools would be criticized if the children became lost. This led me to advocate travel training in community agencies. Recently, I observed an increasing number of schools offering travel training to educable and trainable adolescents as a matter of course.

Another example may illustrate my point. In the late 1950's, some of us advocated that the special education units bring in work where older adolescents could earn as they learn. Many schools turned down the idea because of regulations that discouraged or even prohibited such work-pay arrangements on the school's premises. Consequently, I advocated that work-pay experiences be provided in industrial training workshops, or in a competitive industrial context. Recently, I discovered that some schools have established work-pay experiences within the school.

Recent Major Developments in Inter-Agency Arrangements

Several recent major developments for the handicapped should be noted briefly as they have had a major influence on current patterns of vocational and life preparation. These developments grew from a conviction that preventive rehabilitation required closer liaison between schools and vocational rehabilitation agencies. The conviction was held by many people but its fulfillment has not yet been fully realized.

1. The cooperative work-study program for the mentally retarded had shown real promise by the middle 1950's. A national conference at Ohio State University co-sponsored by three agencies; the unit of Special Education in the U.S. Office of Education; the Office of Vocational Rehabilitation; and the American Association on Mental Deficiency - revealed broad support for the program. Primarily the concept was to arrange a part-time job placement for the older adolescent as a paid job-experience, at the same time that he continued schooling. The 1959 U.S. Government publication, "Preparation of Mentally Retarded Youth for Gainful Employment" became the guide for communities across the nation. The cooperative work-study program is widely used with juvenile delinquents, actual and potential school drop-outs, disadvantaged youth and others.

2. The use of prevocational and vocational training in industrial training workshops became more widespread after the middle of the 1950's. Many of the workshops developed multi-faceted programs including work-evaluation, counseling, social work, job tryouts, job training, help in job placement, and follow-up. At first, many of the workshops took only adults. In the early 1960's, arrangements were made to accept adolescents on a work-study program.

3. Methods and services developed in rehabilitation facilities and industrial workshops were set up in special classes, schools and institutions serving the handicapped. Among such services were prevocational training, work explorations, job tryouts, remedial instruction, group and individual counseling, homemaking, vocational training classes of many kinds, and to a much lesser extent travel training, driver education, and paid job-experience. These cooperative arrangements were made at a state level in Texas where the special education and rehabilitation units were in the same state department of education. In other states and communities, different administration structures produced various ways of developing leadership training, and financing. In California, statewide training programs have had a substantial influence upon local education boards to provide enlarged programs through the channels of special education rather than vocational education.

In the Vocational Education Amendments of 1968, there is in Part G of "Cooperative Vocational Education Program" a mandatory provision "--for cooperation with the employment agencies, labor groups, employers, and other community agencies in identifying suitable jobs for persons who enroll in cooperative work-study programs." Among "other community agencies" for the handicapped are the state vocational rehabilitation agencies, and public and private rehabilitation centers, workshops and other service agencies. Methods must be set up for such cooperative programming. Below I will suggest three "check-points" in the continuum of vocational preparation and placement where such cooperative agreements may be implemented with benefit for all concerned.

Forms of Inter-Agency Programming

The cooperative agreements between schools and other service agencies may take a variety of forms. The cooperative agreements may be classified as follows:

1. Discrete Cooperation. The school implicitly or explicity claims total responsibility and provides all services to the student up to, or very close to his graduation. Then the student is referred to the employment service, or to the rehabilitation agency which now assumes total responsibility. The school makes its records of the student available for consultation as the referral is made. This form of cooperation means that educational program and rehabilitation program do not interact except at referral.

2. Consultative Cooperative Plan. The employment-service counselor and the rehabilitation counselor, and other agency people will be involved in an elaborate evaluation of students some time before the students leave school. However, the counseling responsibility is retained firmly by the school personnel. When the student leaves school, the employment services and rehabilitation agency assume full responsibility, but they use the information from the school.

3. Flexible Community Cooperative Plan. The school and community agencies, employers, labor unions become participating members of the "community team." The community teams makes comprehensive evaluation and a vocational and adult-preparation plan to which all agree, and have shared responsibilities according to services which each agency can provide effectively. This team should be concerned with the student while he is in school, usually when he is about 13 to 15 years of age. The team makes a comprehensive evaluation and helps to formulate plans to provide a continuum of services leading to employment and participation in community life.

The general forms of cooperative arrangements show that "Discrete Cooperation" is essentially a method for systematically making referrals as the student is leaving school. The "Consultative-Cooperation Plan" provides for other agencies to come in before the student makes ready to leave and uses their know-how and services to formulate plans for the student in terminal school years and later. In the "Flexible-Community Cooperative Plan" all agencies provide services which best serve the student; and thus, the community team shares in developing data on each student, agrees on an evaluation, helps in formulating short and long-term plans for each student, and works out an agreement on seeing that recommended services are obtained. These services are obtained in the most appropriate resource in the community, in- or out-of-school, during or outside of school hours, in accordance with the individual plan worked out for the handicapped person by the community and professional team.

Developmental Phases in A Comprehensive Continuum of Services

To provide comprehensive, continuous services in broadly conceived vocational preparation leading to placement, the handicapped need the following:

(1) A foundation of effective personal, social, habits, attitudes, and skills.

(2) Occupational exploration to provide a background of information and set of values related to the world of work.

(3) Self-evaluation arising out of a broad-based professional evaluation.

(4) Individual and group counseling, when needed specifically.

(5) Parent counseling and interpretation.

(6) Formulation of a long and short-term "Plan for Adult Preparation"

(7) Vocational training following the plan developed by the student, parents, members of the school and community team.

(8) Cooperative work-study program including part-time school and part-time work, summer paid employment, industrial workshop experiences.

(9) Re-evaluation in terms of "Adult-Readiness," and provision of services to make the individual ready for placement.

(10) Job-placement and long-term follow-up.

Major Checkpoints

This plan of a continuum of comprehensive vocational preparation has three major checkpoints.

(1) The first major checkpoint is the "Plan for Adult Preparation." This should be based upon a comprehensive evaluation followed by individual and family counseling. The formulation of the plan should involve the community team, and should take place early in the teen years.

(2) The "Re-evaluation for Adult Readiness." This should take place in the late teens, or about the start of the student's last year in school. The purpose of the re-evaluation is to ascertain that the individual is ready for placement and for his role as a young adult. If he is not, an alternative should be developed and initiated.

(3) The Follow-Up After Job Placement. In view of the new pressures imposed by job and adult adjustment, the follow-up is to provide support; to prevent problems from enlarging; and, to furnish counseling for the new adult role. Follow-up serves as "feed-back" to the evaluation group and will serve as the basis for improvement of the program of services. We would expect to obtain leads and recommendations for changes in the patterns and variety of community services including vocational education offerings, as well as material for better understanding of employers, labor unions, the school and special services agencies.

We can expect to encounter misinformation, negative attitudes, and prevailing myths about the handicapped. We will have to:

Establish that many jobs can be open to the handicapped.

Break the attitudes of job-stereo types.

Show that persons with conditions such as mental retardation and personality disturbances can be productively employed.

Reinforce the fact that employment conditions can be varied to suit the limitations of the worker.

Admit that vocational prediction is far from being perfect and that continuing evaluation and change of plans may be necessary.

Support the notion that the handicapped should seek to live in all avenues of social activity whenever possible and should not be forced to seek social outlets structured solely for them.

Show that the severity of the disability is not proportional to employability and that work-motivation and personality factors in each person's make-up is of major importance.

Use experience to make it clear that the personalities of the handicapped are as varied as among the non-handicapped and there is no personality peculiar to the handicapped.

The vocational education of the handicapped will require just as much education and understanding for teachers and members of the community as it will be to provide vocational adjustment for persons with handicapping conditions.

INTEGRATED AND SEGREGATED VOCATIONAL EDUCATION PROGRAMS FOR THE HANDICAPPED

by
G. Orville Johnson, Ph.D.

Integrated and segregated programs for the handicapped have taken many different forms over the historical period of their treatment and education. Initially, as defined educational experiences were being conceived and introduced for these children during the middle and latter part of the 19th century, they were almost exclusively confined to institutions or residential schools--schools for the deaf, the blind, and the mentally retarded. Within these settings academic and vocational training were usually provided as integral parts of their programs. The academic aspects were confined primarily to the "fundamentals." Relatively few of the vocational areas were systematically included. Training schools for the mentally retarded were erected in isolated rural settings and concentrated on housekeeping skills for the girls and farming for the boys. Mechanics and printing for the boys and homemaking experiences for the girls were the primary vocational outlets in schools for the deaf. The piano tuner and blindness were at one time almost synonymous. Some vocal, instrumental, and homemaking training appeared to be the extent of vocational experiences provided in schools for the blind. These programs were the ultimate in segregation.

While one might have expected dramatic changes to occur as the public schools developed community centered day-school programs for handicapped children, very little was noticeable. Special schools, and additions to existing schools were constructed or older buildings were renovated to house these new programs for the orthopedically handicapped, mentally retarded, deaf, and blind. In spite of the fact that educational programs had been placed in the community schools, the isolation and segregation of the children remained complete. Moreover, these early public school programs provided an even less complete vocational education than did the residential school.

A reflection of the inadequate nature of these early programs as well as the programs existent today is the existence and continuing development of single disability based protected workshops as well as the comprehensive workshop that makes provision for all disabilities. The protected and curative workshops were initially conceived as facilities where a person having a disability could be trained to perform some needed and worthwhile job and then take his place in industry. It was very shortly discovered, however, that whatever the good intentions and objectives the group responsible for initiating the workshop program might be, numbers of the trainees could not be place in industry but could perform only within the protected environment of the workshop. Many reasons for this situation were, and undoubtedly still are, present; a basically poor and inaccurate conception of the individual's needs and consequent inappropriate program provided for them, lack of sufficient support to provide the extensive and diverse kinds of training required by different individuals themselves, lack of non-vocational skills such as learning to travel for the blind and oral communication for the deaf that prohibit them from becoming integrated into the general community, perform adequately in industry, and so forth.

While all the early training of the handicapped was performed outside education that is now defined as being Vocational, it nevertheless, was vocational in nature. Teachers, if trained, were familiar with the traditional academic programs that had been, and still are the school experiences provided normal and above average children. Vocational training, and the whole concept of vocational education programs was, and still is, a case of "too little" and of poor quality.

During the early part of the twentieth century two things occurred that could have had an important influence on the education of the handicapped. First, the concept of the separate facility for the handicapped was rejected. Classes for the mentally retarded, deaf and hard of hearing, and blind and partially sighted were placed in day schools appropriate to the educational, physical, and social levels of the children. The programs for younger children were incorporated into primary and elementary schools and classes for older children were housed in secondary schools. The exception to this movement were the schools for the orthopedically handicapped which continued to exist as separate entities. The primary reason for this was because of the medical services required by these children such as physiotherapy, occupational therapy, ramps, wide doorways, halls free of obstructions, and classroom furniture they could use in spite of crutches and wheelchairs where necessary.

The second event that occurred was the development of Vocational Education as a separate educational speciality. Since the State and Federal financial support of these programs was dependent upon enrollments and vocational education was looked upon by the traditional educator and much of the public as a "second class" education and less desirable than that provided by the academic schools, students, any students, were initially more than welcome. As a result many of the less than adequate students found their way into the vocational schools. Some came half-time while still attending a Special Class the remainder of the day. Others were referred upon reaching an age when they were no longer legally required to attend school and the elementary school based special classes had little to offer them.

In general these handicapped students did not meet the physical and/or intellectual criteria established by the Vocational Educators. As a result a number of methods were used to incorporate them to a greater or lesser degree into the various programs. In some instances they were put into a single class as a group so as to interfere as little as possible with the primary business of the vocational school--that of teaching trades to more able students. In other instances they were spread around among a number of regular classes and shops. Here they might be tolerated, used as helpers and runners, sweepers, or occassionally one might demonstrate special aptitudes and a sympathetic instructor would teach him a vocational skill he would use later to earn a living.

At this point vocational education had its first chance to provide for the handicapped. It was done only rarely, however, because of their philosophy of the day. When it did occur it was largely due to the personal efforts of one teacher or one administrator. The program would usually vanish when he left, was reassigned by his superior, or was directed to discontinue it because that type of program was neither desired nor considered desireable. Vocational education lost its first chance to provide a significant contribution to the education of the handicapped.

The presence of the handicapped, as more able students become more accepting of vocational education, was steadily reduced until they practically vanished. With this increased acceptance of vocational education, admission criteria were established. Thus, when a person who appeared to be inept and unable to perform up to standard, he was rejected. If, by some chance he was admitted, he was soon counselled out or frankly told to leave.

These were largely segregated programs. In these instances, handicapped children had little or no meaningful contact with students outside their handicapped group. Where contact did exist it was meaningless from an educational point of view.

While the terms segregation and integration appear to indicate a dichotomy, in educational practice they actually comprise a continuum as will be pointed out. The meaning of the terms in an educational context is essential.

According to Webster's New Twentieth Century Dictionary to segregate means "to set apart from others, separate." Integrate means "to put or bring (parts) together into a whole; to unify." The aspect of segregation and integration the dictionary does not discuss or point out is the "setting apart" or "bringing together" in relation to what. There is ample evidence in the research literature that when handicapped children are physically assigned to classrooms with non-handicapped children, the handicapped are socially isolated and in many instances actively rejected. The teacher can reduce the expression of overt rejection but can do little to improve the degree of acceptance. Physical integration (bringing the parts together) does not insure meaningful types of interaction. Similarly, it may not insure that the handicapped child will receive the instruction that is appropriate to his learning level or educational needs. It only insures that he will be subjected to the same or identical instruction being provided the class or group. This instruction may have little or no meaning or value for him. He is not receiving an equal education. Segregation and integration must be considered within the context of the objectives of the agency.

The objectives of the school is to provide each child with those experiences that will enable him to become the most effective individual possible. As a result he will be able to deal efficiently with his interpersonal relationships, he will participate in the economy and will be aware of the contribution to the total welfare of the society to the best of his ability.

The accomplishment of this objective has required the development of many diverse programs in education that have both integrated and segregated the learning activities of all children in varying degrees. In the case of the handicapped, it has ranged from one end of the continuum to the other--from complete educational segregation with no intercourse with non-handicapped groups by placement in residential schools to complete integration by ignoring, or being unaware of, the handicap and permitting the children to remain in regular grades to cope with their problems as best they can.

Within each one of the categories are numbers of degrees of segregation-integration. For example, while a handicapped child may be leaving the special class to engage in some learning activity with another teacher, that activity may include only members of his group or it may include several members from his group and a number of other students or it may be made up almost exclusively of other students and he is the only handicapped child included. Thus, while no special class as such may be included in a school, varying degrees of segregation-integration may actually be occurring.

The following chart indicates the increments of integration of the handicapped. It will be noted that it refers to the characteristics of the program not the educational experiences provided. Any one child may appear in several of the programs during his tenure as a student and might experience them all.

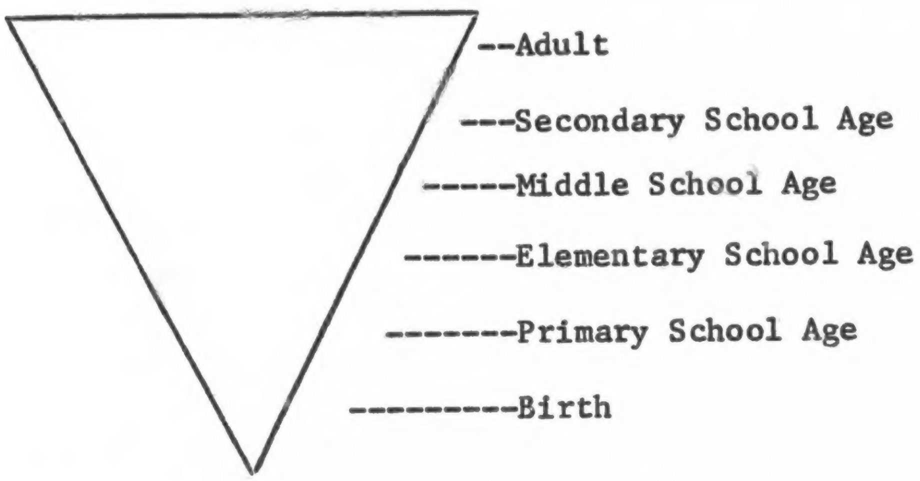
INCREMENTS OF EDUCATIONAL SEGREGATION AND INTEGRATION OF THE HANDICAPPED

Segregation	Institution
	Special School
	Special Unit
	Special Class (self-contained)
	Special Class (with children participating in 1 selected activity)
	Special Class (with children participating in 2 selected outside activities)
	Special Class (with children participating in a number of selected outside activities)
	Regular Class (with resource room)
	Regular Class (with resource teacher)
	Regular Class (with instructional grouping)
	Regular Class (with selected instructional grouping)
Integration	Regular Class

The problem of resolving the segregation-integration controversy eventually resolves itself into the finding of a solution to a completely different problem. How is the most adequate and appropriate educational program provided each child, including the handicapped? In order to arrive at an answer one must first look at the way in which they develop, and then design the kinds of programs compatible with each of the stages of development.

Thurstone in his studies of Primary Mental Abilities has provided a model that educators can use to plan for each individual. Intelligence develops from the general to the specific. Graphically, the development might be likened to an inverted pyramid or cone.

INTELLECTUAL DEVELOPMENT



Following birth the physical, motor, and intellectual abilities are very generalized in nature. They not only become more and more specific but each individual differs to a greater and greater degree from every other person as maturity increases. In addition, within each individual the development of discrete areas will occur at somewhat different rates and to different levels. Also, each individual's abilities to interrelate these areas achieving more and more complex kinds of problem solving and physical and psychomotor application and use of them in the achievement of new and unique performances will vary greatly probably being dependent upon his characteristics, levels of maturation, and training or experiences.

Applying this model to education, it is appropriate that the school curriculum at the primary level be relatively similar for most children. The learners have not matured sufficiently to highly differentiate abilities. In addition, learners have not highly differentiated themselves from one another. By the elementary level some differentiation of development both within the individual as well as between individuals is observable. One child is superior in verbal but relatively poor in quantitative skills. Another has achieved a high degree of psycho-motor ability but may be good, bad, or average in the cognitive areas. Among the children comprising a group, a whole range of abilities in the cognitive, physical, and psycho-motor areas will be present. The within and between differences have magnified with increased maturity and diversity of experiences and will continue to show greater discrepancy with increased age.

In order to accommodate for these differences it is necessary for the school to organize instruction dependent upon the skills and abilities in each of the areas and at levels the children can accommodate to and benefit from. Simply stated, the total organization of instruction must be so flexible that each child is taught at his readiness or ability level.

The particular level at which the child is presently performing, however, is not the only factor that determines his program. First, in most if not all of the areas the child's performance can be improved through instruction and practice. Second, as one progresses into the more complex areas (such as learning a vocation) skills from the physical, psycho-motor, and cognitive areas may all be required in varying degrees and levels of proficiency. Third, some kind of projection concerning the individual's potential must be made before the specific area of endeavor is recommended. Yet, sufficient programming flixibility must be provided that a student is not committed by the recommendation but may move to alternate objectives if this is appropriate.

The traditional school is largely committed to the development of the individual in the cognitive areas. It starts by providing him with certain tools (reading, language, and quantitative skills) and then moves him systematically into experiences concerned with information, concepts and attitudes. Some brief introduction to the physical and psycho-motor areas of development are provided at the middle and secondary school levels but beyond this receive little attention. If more than the introductory, survey type of training is desired, some may usually be obtained at the high school level but primarily through the use of an elective. Following the developmental model, wide choice in all areas (not just the academic) and depth or intensity of areas should be available.

This principle is not only appropriate for the traditional school but for those students who elect (or are pushed into) vocational education. Here there is a wide selection of subject matter areas to study as well as levels of instruction, depending upon the size of the school. The differing levels, however, tend to start with an assumed based of knowledge and competence and tend to be of increasing difficulty built one upon the other. Students without certain initial abilities may not be able to be accomodated and consequently a potentially valuable education is deprived them. A fundamental question arises.

For handicapped students then who often are deficient in general skills, should the vocational school provide special, segregated classes or should these children be incorporated (integrated) into existing classes? The answer to both parts of the question is, "Yes!" Both special classes or sections of classes as well as planned integration is required to provide for their vocational educational needs. The problem is one of planning and developing administrative structures that will enable individual adjustments to be made rather than requiring the individual to do all the adjusting to the pre-conceived programs and instructional levels.

One of the classic misconceptions concerning the handicapped that the special educator has been attempting to combat for over a half century is that the handicapped form a highly homogeneous group. While it is fairly easy to understand that the deaf, blind, crippled, and mentally retarded differ from one another, to the educator who is naive in respect to their true characteristics *a* program should be able to be defined that will provide for all the members of a sub-group. Such is not the case since multiple factors operate within each individual (amount and kind of intelligence, previous total experiences, age of onset, the extent of the handicap and psychological reactions to the handicap to list only a few) that cause even these subgroups to be more heterogeneous than persons comprising the "normal" population.

The following are some fundamental principles to follow in organizing instruction. These principles, while being directed toward the programming of the handicapped, are equally applicable to all populations in all kinds of communities and schools.

1. A single approach to the solution of how to provide an appropriate vocational education for the handicapped does not lie in the organization of segregated classes nor in integrated classes *per se*. The answer to the correct educational placement of a child lies only within him. He must be placed in *that* class, with *that* group of children, and receive *that* instruction that is meaningful and has value to him, and taught at *that* level that he can learn.

2. Segregated and integrated programs, as usually defined, are mechanistic approaches; structures that in and of themselves solve no problems. Once programs are conceived to provide for the vocational education of all potential recipients, the appropriate structures can be developed. The probability is that most schools will find that both approaches are essential if all the handicapped children, as well as all the students who do not meet the accepted definition or criteria of the handicapped, are to be provided for.

3. No single characteristic can be used to determine the appropriate class placement of a child. Thus, his placement is not determined by his handicap.

4. Separate, segregated instruction should be recommended and provided only when no existing class can be used to give the students the kind and level of instruction necessary. In many instances some pre-vocational class may have to be organized to provide students with the training essential to benefitting from vocational classes later. Only those children, however, should be placed in these classes that have need for this instruction and will derive benefit from it.

5. When a handicapped child is placed in a regular or existing class, he should have the necessary skills and abilities to participate on an equal basis with the rest of the children in the group. This does not preclude the necessity for making adaptations in machinery and equipment where this is required due to a physical or sensory disability.

6. Supportive, ancillary services should be provided. Thus, if a child has the essential physical and psycho-motor skills as well as basic understanding but insufficient reading and/or mathematics skills, for example, special instruction should be provided without inhibiting his vocational instruction. These supportive services may consist of special classes, resource rooms and teachers, and counseling, guidance, and other psychological services.

7. In the placement of a child his strengths and positive characteristics are the fundamental considerations. His handicaps only determine areas in which he will have great difficulty or cannot perform. They are not his vocational determiners.

THE EDUCATION OF MENTALLY HANDICAPPED YOUTH IN A LARGE URBAN COMMUNITY

by

Jerry Miller, Ed.D.

The staggering problems which confront Americans on the international political stage, recurring wars, the crisis in the cities, poverty might tend to reduce education problems to obscurity. But Congress and state legislators, in their wisdom, have increasingly reflected their thinking in legislation supporting education. The recent Vocational Education Act of 1968 which provides for "set-aside" funds specifically for vocational and technical education for the handicapped demonstrates an abiding faith in humanity coupled with a hard-headed kind of economic realism. The effect of this is the requirement that educators utilize their special talents and training to enhance vocational education.

The ultimate purpose of vocational education for the handicapped is to provide each student with the skill, training, and ego-equipment vital to work and to live as a self-directing member of his family and community. To this degree, general and vocational/special educators engaged in vocational preparation have a common destiny in the aspirations they hold for their charges.

Consonant with this overarching purpose, there must be at last an understanding and an acceptance of the premise that special/vocational education is not second-class education - that there is nothing demeaning nor denigrating about training and skills that involve a blue collar or entail work with tools. More than any other single notion that has disturbed the priorities of the special/vocational educator is the myth and dangerous fiction of counseling, either by parents, school, or community advisers that college is the only way to the fuller more meaningful life - that higher education is the only path to a life of dignity, pride and self-respect. Unprecedented automation cannot begin to temper the critical shortage of personnel and manpower in the trades, occupational, and vocational services. The heritage of hurt and disparagement which special/vocational educators have had to bear is to cut-off our proverbial noses. Nourishing, as a consequence of misinformation and ignorance, the folly of encouraging unrealistic vocational or academic objectives irrespective of the student competencies and goals is to do incalculable and irreparable harm to our youth. Frustration, resignation, and despair must follow such misguided practices. Schools must make prodigies of efforts in a concerted and sustained program to honor the dignity of special/vocational education, its aims as well as its professionals. As an antidote to the present mosaic of contradictions that prevail in our schools and in our society, we are suggesting the urgent need for a broadly based public relations campaign that unfolds all the **dimensions** of the special/vocational education program. Principles, teachers, counselors, parents, community leaders, along with college officials must become allied if it is ever to be truly susceptible to solution. If education is to make a difference in the lives of our youth, we must stop beating the drums over pointless fantasies that lead only to that bottomless abyss of disappointment.

Once we can agree that our planning and teaching must be shaped for productive change in the lives of all youth, a basic categorical imperative will emerge demanding our full attention. Without this component, failure will haunt all our efforts.

Those of us who have trained and worked in special/vocational education have been practicing the precepts of individualized instruction long before the term became fashionable. Some have emphasized the need to "reach him before you raise him," and it is precisely in the realm of students' self-awareness and self-discovery that the major break-throughs will be executive in the years just ahead.

Thus far, we have devised better diagnostic techniques, more sophisticated remediative instruments and fashioned earlier identification training projects and evaluation programs. All of these represent giant steps in the direction of assisting the school to do a better job with the student after he has made a personal commitment to the program. To that young unmotivated boy or girl who comes into the learning environment emotionally, mentally, physically, or economically handicapped, school remains a remote and hostile place, one in which the cures and nostrums alluded to earlier make little impact. We have all observed the devastation and havoc that an unthinking or unfeeling society can accord to such youth. Through indirection school personnel and parents may convey and reinforce the low self-esteem of handicapped students. Convinced that he is less than the best, the student will begin to manifest the syndrome of characteristics typical of the damaged self-ego and live at a low level of expectation. Too often this youth will ultimately swell the ranks of the alienated, join the parade of relief-recipients, waste away as an institutionalized ward of the state, or become s statistic on a police blotter as a proper subject for the Kerner Riot Report. If this train of tragedy is to be broken in a decisive manner, we as special/vocational educators are truly men-on-the-spot.

The special/vocational educator, we respectfully submit, must begin to assume a role with an added dimension - that of the humanist. In the final analysis, it is our collective sense of humanity, of humanness that must be underscored in this paper if we are to introduce a difference in our perception of the problem and our function.

We who labor in the vineyard of special/vocational education, especially for the handicapped, must not forget that the children we teach are truly "special." These youngsters have a long history of failure and are thwarted by dismal memory of past failures. Every attempt to train these children must be predicated upon the development of positive self-concepts and self-esteem.

Consonant with any program to master content or skills, in a climate of new sensitivity, the special/vocational educator must guide his charges to an even greater concept of self-awareness - postulated upon the question: "Who am I?", "How high may I aspire using my assets and in spite of any deficits I own?" There can be no dispute about the value of cultivating healthy personalities which reflect a "Yes, I can" attitude and disposition in learning.

When commitment from special/vocational educators has been realized along with a recognition and acceptance from them of the self-concept key, we must pose three critical questions:

Where are we not being maximally effective? What new problem areas lie ahead? How can we overcome them?

In the studies of special/vocational education, there are eight recognizable areas of need. They are as follows:

(1) Early vocational orientation and programming; (2) Case management designed for maximum flexibility; (3) Improved pupil evaluation and follow-up; (4) Personnel and instructional materials; (5) Increased reality orientation in training programs; (6) Surveys to determine future job opportunities; (7) New specific programs for the various areas of handicap; (8) Continuing special/vocational education for adults.

1. Early vocational orientation and programming

Vocational education has traditionally provided programs for children in the 14-16 year age range. With handicapped youngsters this effort may come too late. We must start early in the elementary grades where the foundation is laid for good work habits and attitudes. A statement of Erich Fromm's undersocres the reasoning here: "In order that any society may function well, its members must acquire the kind of character which makes them want to act in the way they have to act as members of the society or of a special class within it. They have to desire what objectively is necessary for them to do. Outer force is replaced by inner compulsion, and by the particular kind of human energy which is channeled into character traits."

Programs must be developed to release the full potential of every child. It seems to be a law of human nature that success breeds success. If these children experience success consistently through real achievement, they cannot help but grow up better able to take their rightful - and useful - places in society. We can realize this goal. But to do so, we must take care to provide understanding and acceptance for these children who need just a little something extra; we must take care to give them the little extra support which will allow them to develop attitudes and skills so that they may become truly productive members of our society.

One means of helping programs designed to realize these goals is to have a team of concerned individuals including teacher, counselor, school administrator, and representatives from industry pool their ideas of what is necessarily included in the school program. In educational jargon, their product is called a curriculum guide.

The City of Philadelphia has two such guides. The first is unique in that it is designed for use beginning in the early elementary grades. To quote from the Foreword of this guide, "The pupil must be led toward an understanding of the relationship between people and things; he must also develop an appreciation of the fact that only through work can he achieve dignity and self-esteem - the right of every American." I am convinced of the merit of joint collaboration on guides of this kind, and therefore heartily endorse their compilation and use.

2. Case management designed for maximum flexibility

"The needs of trainees differ even within a select population such as the retarded. To provide for these differing needs... necessitates a flexible program which can be tailored for each trainee and can develop (his) fullest vocational potential in the shortest period of time." There probably is no limit to the amount of flexibility we can build into special/vocational educational programs. Along with it must go constant search for means to effect such elasticity in daily scheduling, rostering, job placement, and even in length of tenure in a program.

In organizing programs, attention must be given to both state and federal regulations governing employment of minors. Pennsylvania, for example, utilizes the term STUDENT LEARNER which is defined as a minor sixteen years of age or over enrolled in a course of study and training in a cooperative vocational training program conducted by a school with a written agreement with the employer. These regulations require close supervision of students by qualified and experienced personnel. The program also requires safety instruction and approval of the agreement by the employer, parents, and school principal.

These state regulations recognize that employers will derive a minimum of immediate advantage from the work of handicapped students and issue special licenses which permit employment at a sub-minimum wage for the duration of the school year but provides for no less than 25% of the established applicable minimum wage.

The Duluth schools have built into their academic and work programs a great deal of flexibility through the use of "student work contracts." These require of the student a certain amount of work of an academic or of a performance nature to be completed within a given period of time. These contracts may be in written form, or on audio-tape if the child has a reading problem. "Every attempt is made to provide opportunities for the student to think out each operation required of him with a minimum of verban direction from a staff member." Flexibility is thus shown by a staff constantly on hand to further modify contracts when the needs arise.

One program in a major city allows for flexibility by tailoring program lengths to individual student needs. Students are placed after elementary school into work orientation sections. After demonstrating sufficient maturity, they are then accepted into freshman classes at the Occupational Training Center (OTC). Length of placement in any class at the OTC is very flexible, and may range from one month to two or three years. Length of placement in any phase of the program depends upon many factors. Attitudes toward work and toward authority figures are considered very important. Punctuality and perfect attendance are stressed. Dependability and reliability are considered at least as important as skill development in determining whether or not a child moves from one phase of the program to the next.

Another meaningful program also allows for a great deal of flexibility by its assignment of pupils to work evaluation stations. Aptitudes, interest, attitudes, and demonstrated abilities all figure into placement decisions; a wide range of placement possibilities is always open. There are thirty different types of in-school occupational training shops within this program.

In summary, the entire concept of vocational education for the handicapped child must be revised and reviewed with four basic goals in mind:

1. To build on assets, and not be overly concerned about deficits caused by handicapping conditions;
2. To build positive self-image through success experiences, where previous failures have bruised egos;
3. To recognize and capitalize on individual differences, rather than let them hinder us;
4. To break down rigid and stereotyped views of program personnel and facilities, and substitute in their stead new and flexible approaches to case management.

3. Improve pupil evaluation and follow-up

Has anyone who has worked in the field of special/vocational education ever stated that IQ can predict job success? The question, is of course, rhetorical, and the answer is a resounding NO. But most tests we use to evaluate the aptitudes and abilities of our pupils have limited value in use with the handicapped, particularly the mentally retarded. And if some tests happen to be free of intellectural bias - as the General Aptitude Test Battery (GATB) is purported to be - we lack information on the extent to which the results are effected by minority group status, cultural deprivations, and other such factors. Most people in the field agree that evaluation of work performance is the best means of predicting succes or failure. William Gellman envisages the vocational counselor of the future as assuming an evaluative function by moving "into the community, evaluating the client on the job in industry and in noncompetitive work programs. Clients will be systematically followed up for extended periods of time and returned to the workshop should on-the-job problems arise."

The evaluation procedures in one large city rely heavily upon work experiences. What approximates the junior year in this program is devoted to evaluation of work potential. This is accomplished through a cooperative program with that state's Bureau of Vocational Rehabilitation. Each class, with its teacher, is assigned to an outside industrial organization or institution for fifteen hours weekly.

Pupils rotate through six 6-week work stations. At a work station, the student spends his time in performing work which he could aspire to on a similar entry job such as laundry, office work, or transportation. (The remaining school hours are spent in school with the same teacher, who reinforces and extends learnings which occurred on the work stations.) At the end of each six weeks, the supervisor from the cooperating institution sits down with the teacher and the pupil and together they evaluate the student. At the end of the year, the teacher fills out the Summary Prevocational Evaluation. This record indicates the students strengths, weaknesses, interests, work capabilities, and personality and facilitates future job placement.

When the school team (job coordinator, classroom teacher, counselor, and administrator) considers a youngster to be "job-ready" the job coordinator, who serves as liaison between school and the business world, helps the student find appropriate part-time employment. After a demonstration of success as judged by student satisfaction, employer satisfaction, and positive supervisory reports, the student is considered for full-time employment. Following full-time placement, there is a continued follow-up by the job coordinator, who assists in the pupil-employee's adjustment to full-time work in what may be the same or a new organization. The school teachers each pupil-employee to make and use a budget. Each student's budgeting habits is supervised to assure that each budget includes "every pay-day" savings as well as room and board payments to parents.

One of the greatest problems facing the handicapped youngster upon graduation is inadequate support. Every young person early in his working life, handicapped or not, meets problems both of a personal and occupation nature during his employment. It is essential that the youngster feels "he is not alone" and can turn to those individuals whom he knows best to advise and support him. It is necessary that the employer help to be understanding if problems arise.

4. Personnel and instructional materials

A lack of systematically trained personnel as well as a dearth of attractive, published instructional materials is a critical problem.

It is patently unreasonable to expect untrained personnel to assume programming responsibilities for the classroom. The training of skilled industrial workers to the principles and techniques of vocational and special education is essential.

There is a need for professional preparation of programs for administrators of special centers and vocational schools. In-service programs should be designed for special/vocational administrators as the basis for program improvement and expansion.

Orientation must be conducted with employers since many employers may be reluctant to hire the handicapped. They need to know, for example, that the President's Committee on Mental Retardation notes that "the nearly 5,000 mentally retarded workers in 40 federal government agencies receive a higher percentage of outstanding performance ratings than any other government workers. "A national food service company that has employed retarded workers for more than give years found in a comparative study that retarded workers stay in their jobs over twice as long..."

The Philadelphia School District relies upon teacher-made instructional materials because of limitations of existing commercial materials.

5. Increased reality orientation in training programs

The retarded have difficulty in transferring learning from situation to situation. It is not unusual for a retarded educable child with proper instruction to demonstrate the use of a ruler in the classroom; however, the same student may be unable to measure materials on the job. We must find new means of making our training programs more like "the real thing." Such reality based learning will have other beneficial effects, such as improving our ability to predict job success.

Innovations are needed now in programs preparing for on-the-job training which establish a closer facsimile to the job experience itself, be it welding or waiting on tables. One program for retarded educable children utilizes a complete laundry and dry cleaning unit including the related retail store operation. The unit operates just as would a normal business establishment: all equipment for textile maintenance are on the premises, production standards for quality and quantity are set for the pupil-employees, and students, faculty, and community residents bring garments to the "store" for services for which a charge is made. Pupil-employees punch a time clock, must live up to normal business standards in dress and conduct, and perform in all phases of the operation under the supervision of their teacher. This kind of education is superior in helping children become accustomed to the work in textile maintenance, retail sales, laundry and dry cleaning, than typical classroom activities.

6. Surveys to determine future job opportunities

Surveys to determine future job opportunities are necessary. Occupational surveys such as those prepared by the local Chambers of Commerce and Federal Reserve banks should be used as a basis for planning training programs. Trade associations welcome the opportunity to participate in surveys designed to reduce labor shortages.

A recent government study projected that the greatest labor shortage exists in the service occupations. Since we are dealing with youngsters who possess limited intellectual potential, it seems reasonable that they should be trained to fill these shortages. Industry would tap this new reservois of manpower.

PROGRAMMED INSTRUCTION

Programmed instruction is no longer viewed as a fad. It teaches more, and better in the same amount of time when compared with conventional teaching and training. Geary A. Rummler, director of the University of Michigan Center for Programmed Learning for Business, has said that, "The industrial educational system is in the forefront in producing educational innovations."

Clark and Sloan admonish the schools:

> "During recent years, all institutions have been confronted with increasing costs, manpower shortages, and mounting demands. Industry has, very generally, met this challenge by adopting new technological processes and procedures, resulting in increased productivity. Workers produce more in less time with less manual effort; wages are increased; plants are modernized and expanded; and in many cases the quality of the product is improved. Public education is slow to learn this lesson. Perhaps competition motivates while subsidies inhibit."

Industry has been utilizing programmed instruction to teach job related tasks. It is used to teach resistor color codes, industrial security, and blueprint reading with standard programmed instruction, and uses a custom designed machine to teach service station attendants. Another company has utilized audio-tapes in programmed instruction to train personnel to listen effective. Recorded program instruction has been used to teach touch typing and keypunching. It has been found that verbal programs did not train in manipulative tasks and this led to a working audio-visual system to train workers to make solderless (crimp pin) connections. Conventional instruction spent eight hours training for this task; the A/V system can do it in forty-five minutes.

Special/vocational education could apply similar programs. Programmed instruction would" (1) train one or two students at a time; (2) would increase the scope of occupational training programs; and (3) would free teacher time for activities such as guidelines and counseling.

OPERANT CONDITIONING

Programmed instruction techniques grew from the very same school of psychology which gave rise to the use of self-conscious operant conditional methodologies. Operant conditioning procedures provide a systematic and effective means of modifying behavior. Operant procedures have been used by class teachers of the handicapped. Its demonstrated effectiveness leave no doubt that it could be adapted for use in developing vocational skills.

MOBILE INDUSTRIAL ARTS LABORATORIES

Mobile industrial arts laboratories or "portable shops" can be stationed at one school for an entire semester and them moved to another location. They can be moved daily to serve many schools during a day. One community in Illinois employs a teacher who serves as driver and teacher of a mobile shope for educable mentally retarded students at high schools. It has four separate areas: reproduction machines (multilith, spirit duplicator, etc.), work tables (staplers, collators, etc.); dark room; and silk screening. The use of mobile units can be expanded.

GROUP COUNSELING

Job opportunities for handicapped children are more limited than for their normal counterparts, but employment can be found. Perhaps the biggest problem lies in helping the handicapped person realistically assess his assets and liabilities as they relate to job possibilities. Very often our students set their sights either too high (in which case they are ultimately frustrated) or too low. Vocational guidance and counseling of the handicapped must begin early in the child's school career and continue until the child has found an appropriate outlet for his talents. Few school systems can find a well trained staff large enough to fulfill this task. Group counseling is recognized as a useful way to solve the professional manpower shortages.

CONCLUSIONS

"Whereas muscle power accounted for almost two-thirds of all productive power in the United States a century ago, today it accounts for only a little over one percent." The implications for education of such staggering change in labor requirements are manifold.

Jobs go begging, because of a lack of trained manpower, while ready and willing (but unable) workers search vainly for gainful employment. Too often, these are handicapped persons. During these days of rushing change, it is our hope that through providing special/vocational programs we shall decry the darkness, kindle some bright candles, and release student potential, confidence, and self-esteem.

The problem is complex, unbelieveable in magnitude and will tax our resources. Increased financial support without engaging educational specialists such as vocational educators and educators familiar with the handicapped in meaningful productive team work, the work of human resources will continue to blight our country.

THE NATIONAL CONFERENCE ON VOCATIONAL EDUCATION OF HANDICAPPED PERSONS

February 25-27, 1969
Pittsburgh, Pennsylvania

SUMMARY OF CONFERENCE WORK GROUPS

Conducted By:
Program in Special Education
and Rehabilitation
University of Pittsburgh
Pittsburgh, Pennsylvania

Sponsored By:
Division of Vocational
Technical Education
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THE NATIONAL CONFERENCE ON VOCATIONAL EDUCATION OF HANDICAPPED PERSONS

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SUMMARY OF CONFERENCE WORK GROUPS

Administration

- Overlap and waste in existing vocational and occupational oriented programs should be elminated to assure efficient use of available funds.

- In order to properly serve each group, clear distinctions must be made between the "disadvantaged" and the "handicapped."

- Possible allocation of fiscal responsibility to share total cost of programming the three agencies.

- Direction for the equitable distribution of available funds from various sources should be sought from local programs.

- The use of labels which have negative connotations for potential employers of the handicapped should be restricted.

- Each agency should clearly define its responsibility in the vocational training of the handicapped.

- Each state should establish an office to serve as liaison for grouping, planning and coordination.

- Integrate the handicapped into existing programs wherever possible.

- A program director should have responsibility at the state and local level to coordinate services.

- Program planning should include provisions for overall management services.

- Shared resources offer one solution to provision of services in rural areas. Consortium arrangements are suggested for plant, transportation, financing and related problems.

- Existing professional associations, committees and similar groups can provide forums for the interchange of ideas.

- Creative means of involving the segments of the community on a sustained basis should be developed.

- Present efforts to inform and involve the community should be improved through creative use of media.

- Adequate answers to the problems of injury liability should be found. Employers and others must be clear as to their responsibility.

Instructional Program

- Team approaches to planning and evaluation, teaching and other essential services are possible and may prove useful.
- Mobile units with work stations in trailers should be implemented to provide services where population is scarce.
- Expanded use of half-day vocational education programs is indicated to double the number of potential openings for training. Students can participate in community work experiences for the portion of the day not spent in school.
- Begin vocational training early for all children.
- Expanded use should be made of follow-up services to continue the adjustment process after placement has been made on a job.
- Re-training of the handicapped should be provided as occupations become obsolete.
- Arrangements are necessary to provide adult education for under-employed handicapped persons.
- Student personnel management responsibilities are vitally important and should be carefully assigned as programs are designed.
- Specific job training should be part of the total program.
- General work adjustment should be stressed in the instructional program.
- Vocational guidance should include orientation to the world of work, as many handicapped persons have limited knowledge of potential occupations.
- Programs should be flexible enough to accommodate individual differences.
- Evaluation of individual progress should include provision for self-evaluation.
- Careful consideration should be given to assuring that credit earned in programs is transferable within and outside of the school system.
- Job training should relate to the community in which the job is to be performed.
- Training manuals should be written at the appropriate grade levels to accommodate reading deficiencies.
- Communication skills should be developed.
- Programs should be sequential and of sufficient scope to interest diverse student populations.
- Occupational exploration should include actual experiences in various job settings.
- Common elements of jobs should be taught with specialization following.
- Social adjustment should be part of the instructional program.

- Students should be trained to handle money, leisure time, and consumer responsibilities.
- Levels of training should be available within job families to assure relevance to the handicapped.
- School credit should be given for work done by student in the community.
- Mobility skills and orientation should be included as an integral part of the program.
- Comprehensive programs in training areas are needed to train people for levels of jobs within occupational clusters.
- A clear distinction is necessary between specific training and prevocational training, with the latter being a prerequisite to specific training.
- Training opportunities should be available to prepare persons for self-employment in small businesses.
- Architectural advances to modify facilities for the handicapped should be undertaken.

Supportive Services

- Sheltered employment should be considered gainful employment.
- Specific job training for the handicapped can often be performed by private agencies working in cooperation with the public schools.
- Professional personnel should be assigned to work with parents in counseling relationships.
- Rehabilitation facilities should be utilized in the effective implementation of work skill training when such is not possible in the public schools.
- Social work services should be available to expand the available program of services.
- Private trade and technical institutions should be utilized in the skill training process. Their programs should be coordinated with offerings in public facilities.
- Local community clearing houses should be set up to serve as referral aid for the handicapped to specific services, not fragmented as is presently the case in many areas.
- Careful consideration should be given to placement and follow-up in a sequential local program.
- Group and individual counseling should be strongly emphasized.
- Job analysis should precede instructional decisions to assure relevance to a particular child.
- Artificial entry requirements which restrict eligibility should be replaced with behaviorally relevant criteria.

- The handicapped child should have ready access to programs in general education in the school district.

Personnel Preparation

- Programs should exist which foster realistic attitudes toward the handicapped among personnel being trained to work in vocational education.
- Programs should exist which train people regarding the heterogeneity which exists among people labled as "handicapped."
- The elimination of persisting differences in terminology, classification, and other related concepts can be the subject for pre-service and in-service training.
- Personnel training should include practical experiences in job placement, work experience programming and follow-up.
- Summer workshops and institutes should be offered for teachers, counselors, supervisors and administrators conducted by a consortium of the three agencies.
- Close and cooperative working relation with University vocational technical and special education in planning for professional training should be established

Directions

- Minimum wage laws, restrictions of organized labor, inadequate motivation, physical limitations and age restrictions should be studied as possible unnecessary hinderances to industrial involvement in evaluation, training, and placement of the handicapped.
- Feedback of individual student experience should be used to produce change in training programs.
- New approaches are needed in the assessment of vocational potential in the handicapped.
- Programs are necessary to reach minority groups.
- Planning efforts should be coordinated with other state and national advisory boards, (e.g., ESEA).
- The establishment of joint planning committees at local, state, and national levels could be helpful.
- There should be cooperation among agencies in the nomination of persons to serve on advisory boards.
- The use of ex-officio members to expand the resources of advisory boards is recommended.

- Long-range planning should be undertaken at all levels to facilitate development of relevant programs.

- Exemplary programs should be reported to the field in a systematic fashion to facilitate the constant communication of ideas.

- States should clearly state the lines of communication possible for local people to get answers to questions or receive directions.